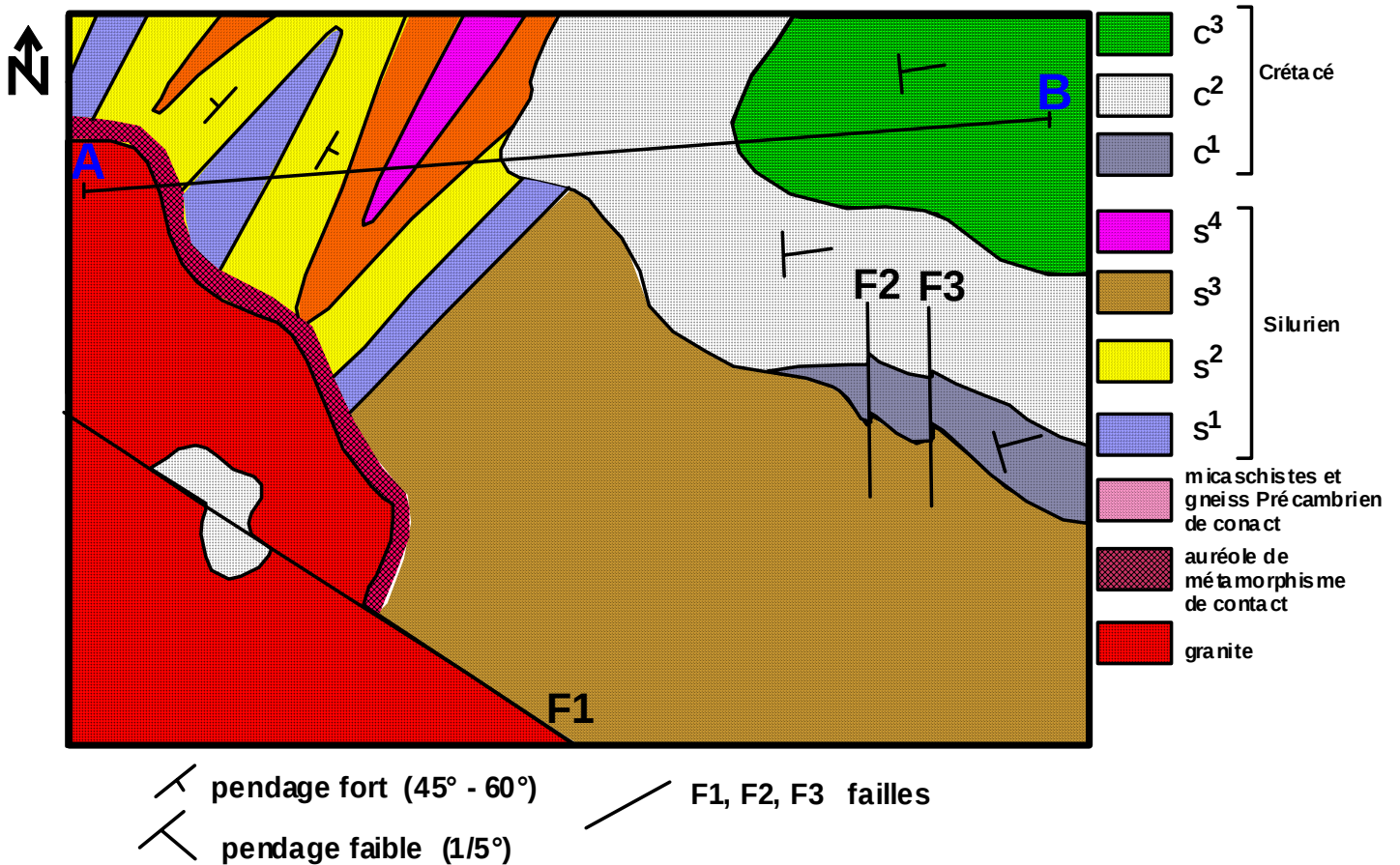


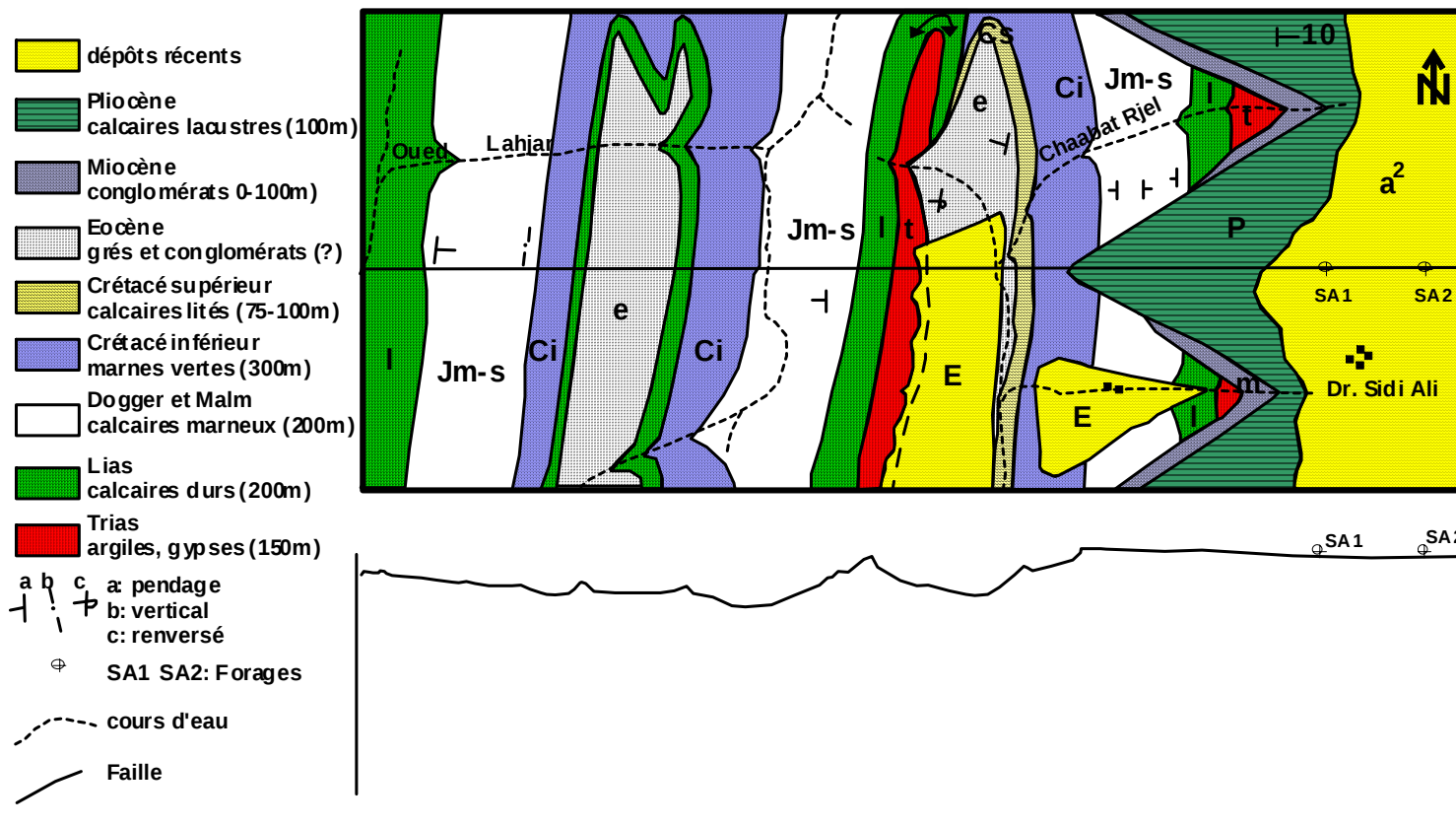
COMMENTAIRE DE CARTE

CARTE GEOLOGIQUE SIMPLIFIEE



1) Dégager la nature et la chronologie des principaux évènements stratigraphiques, tectoniques, métamorphiques et plutoniques qui ont affectés cette région. La topographie est horizontale et l'épaisseur de chaque couche est supposée constante.

2) Réalisez la coupe AB.



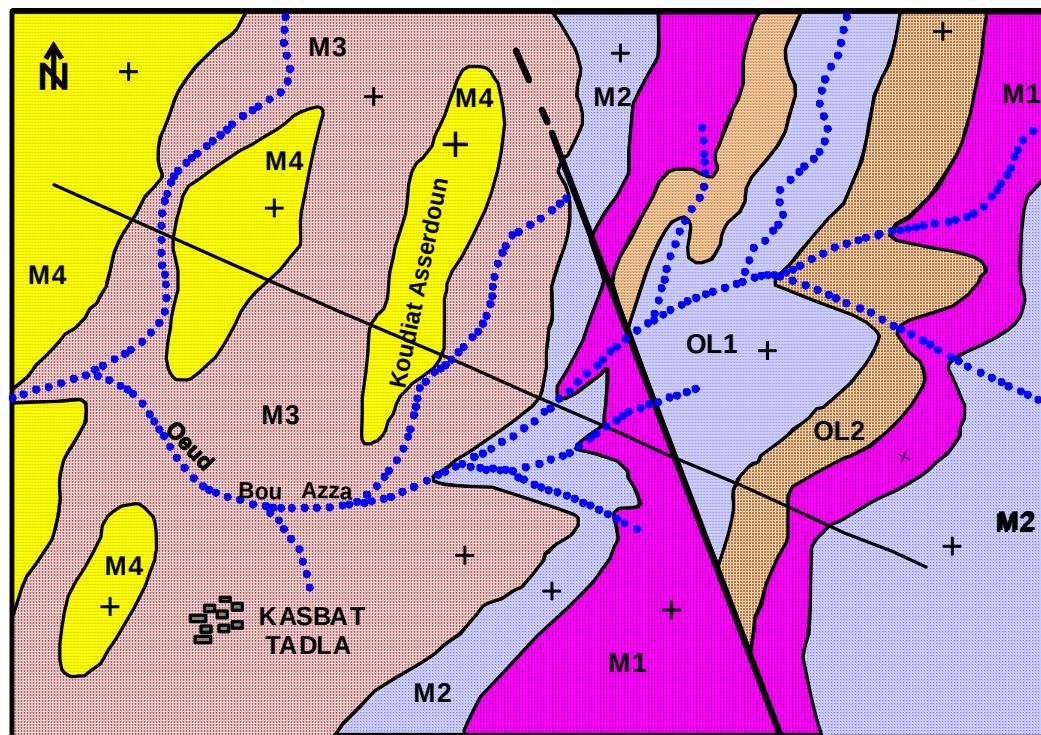
Compléter la coupe sachant que :

- Le forage SA1 a rencontré : 10m de a^2 , la base de (P) à -75m, la base de (m) à -150m, la base de (l) à -250m.
- Le forage SA2 a rencontré : 10m de a^2 , la base de (P) à -100m, la base de (m) à -200m, la base de (Jms) à -250m, la base de (l) à -475m.

(Profondeur sous le point de forage pris comme le zéro).

EL GARA 1

Echelle 1/ 50.000^é



LEGENDE

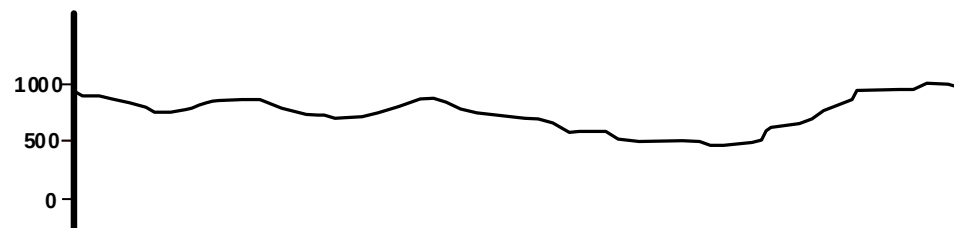
- M4  Miocène supérieur. grès-120m
- M3  Miocène sup.: onglomérat-150m
- M2  Miocène inférieur arnes-100m
- M1  Miocène inférieur. clcaires-200m
- OL2  Oligocène supérieur : argiles-150m
- OL1  Oligocène inf. : artzites -150m

 Contact anormal

 Contour géologique parallèle au courbes de niveaux

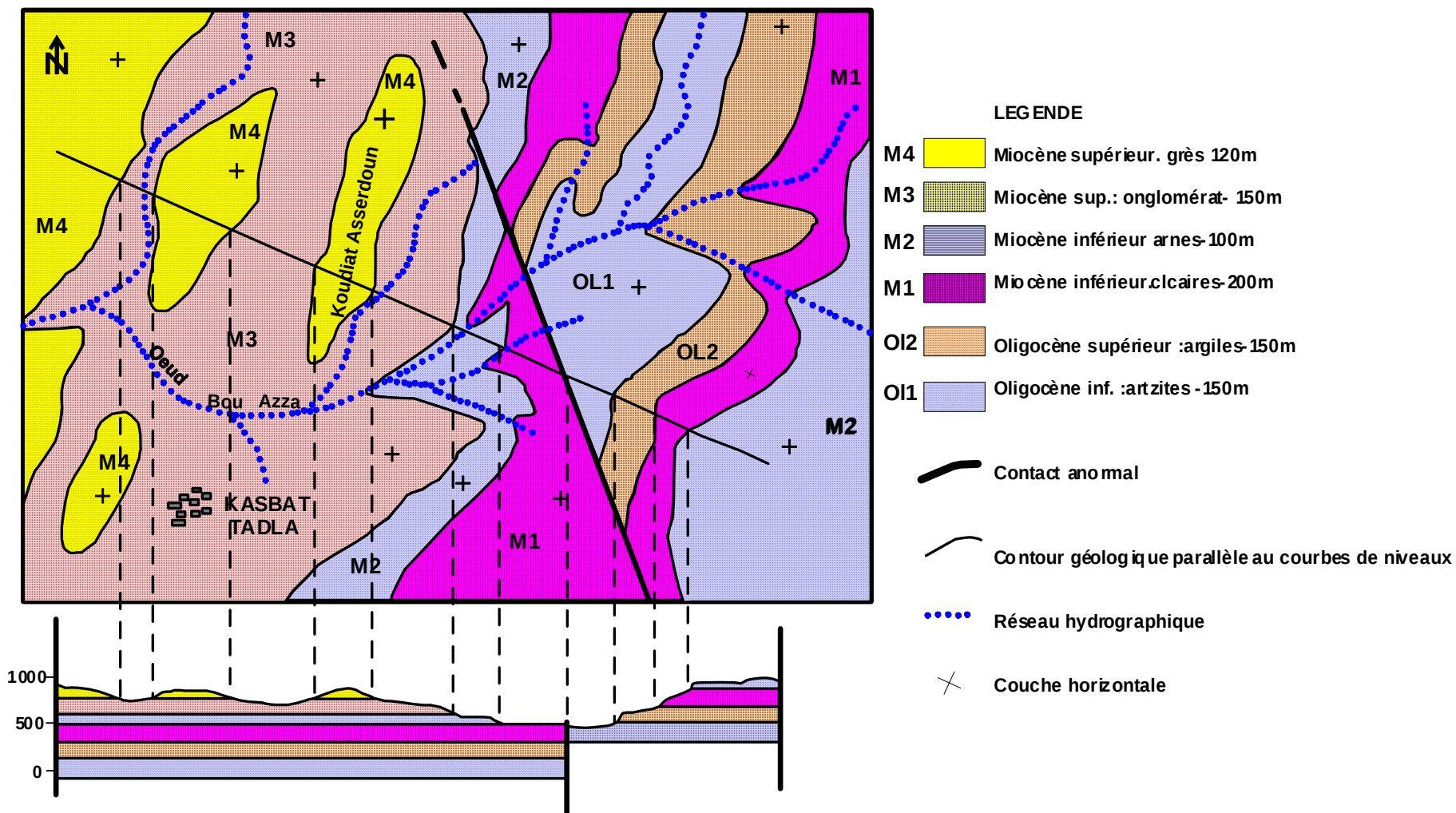
 Réseau hydrographique

 Couche horizontale



Echelle 1/ 50.000^é

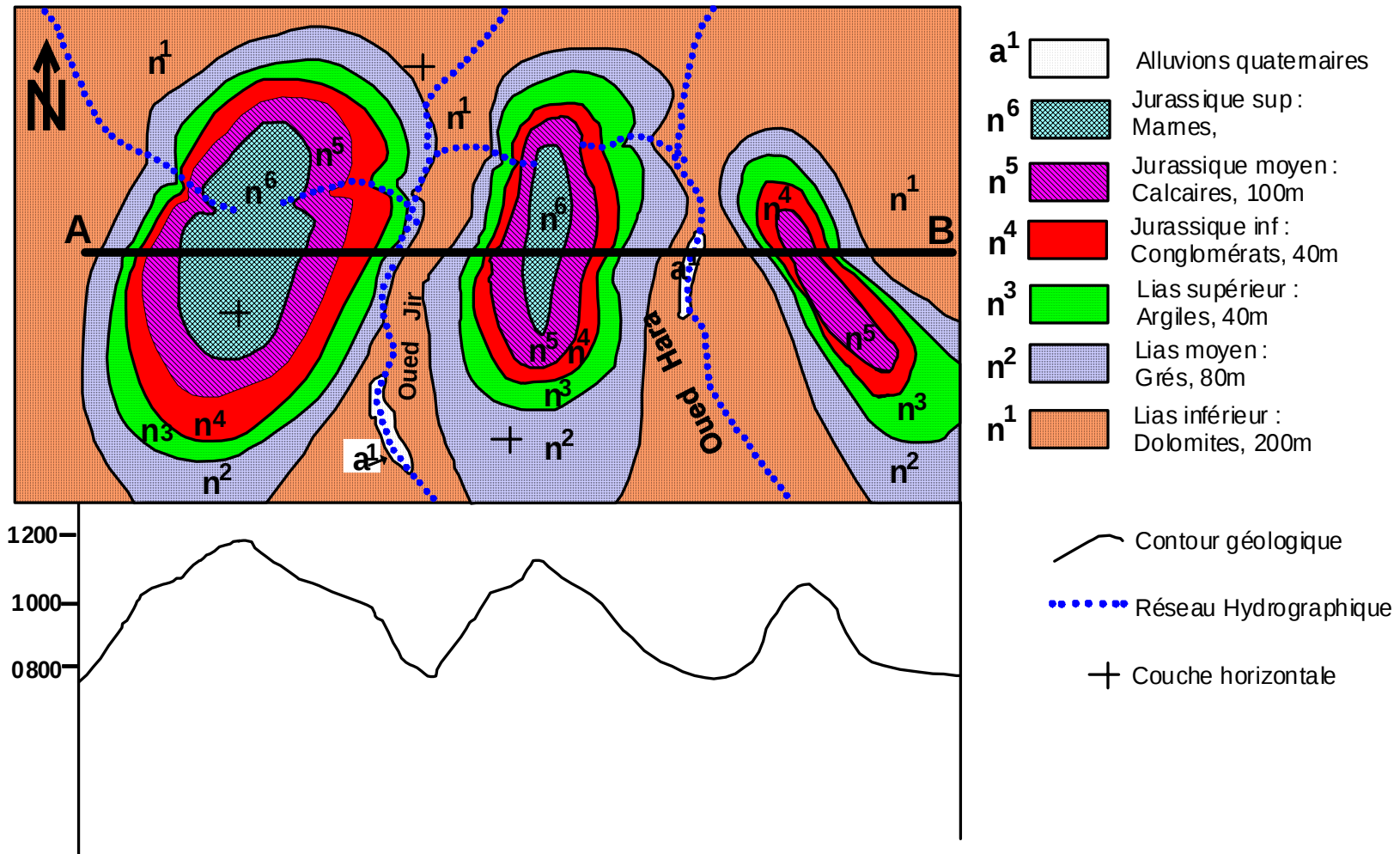
EL GARA 1



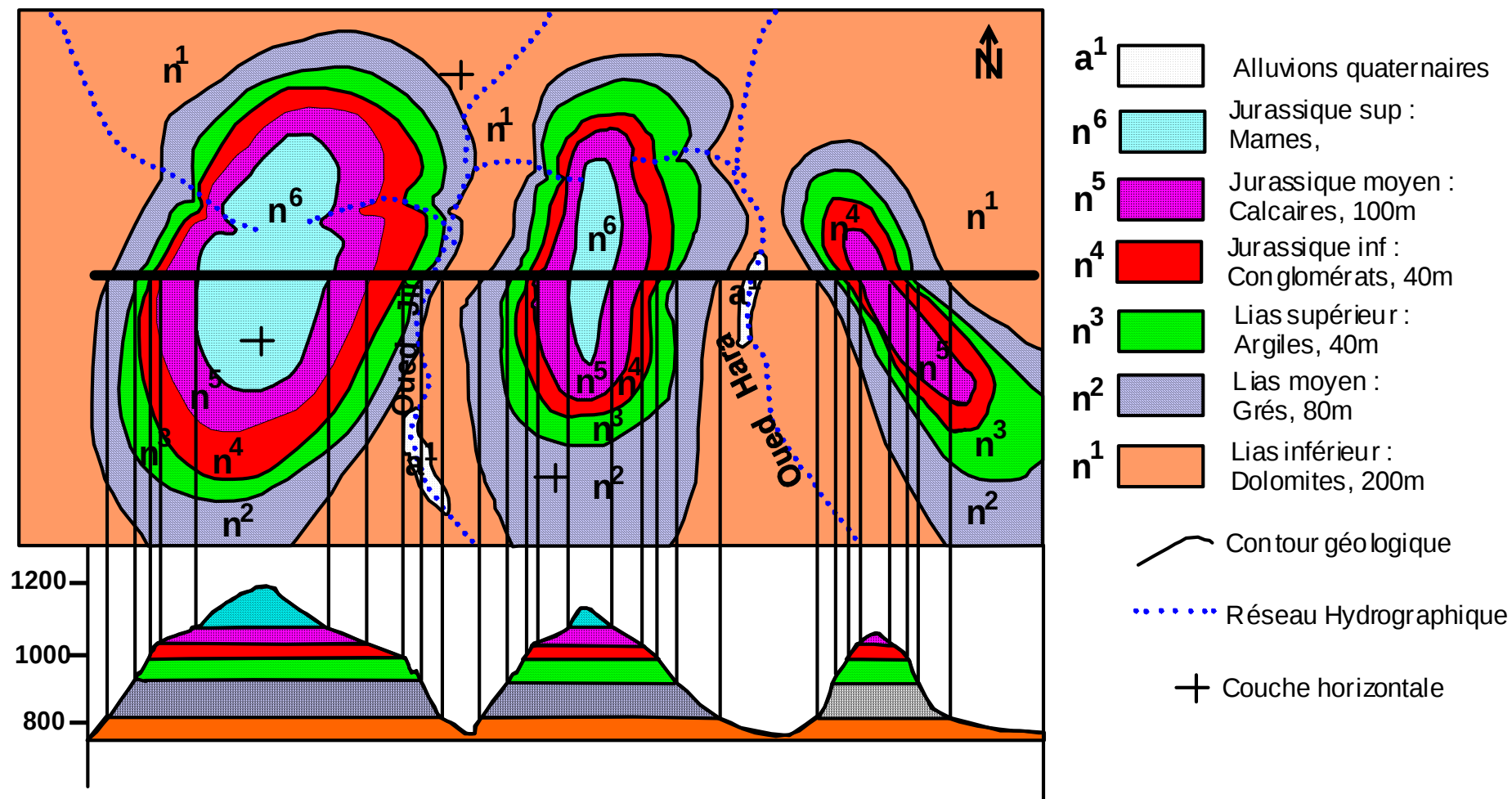
EL GARA 2

Echelle : 1/20.000^e

LEGENDE

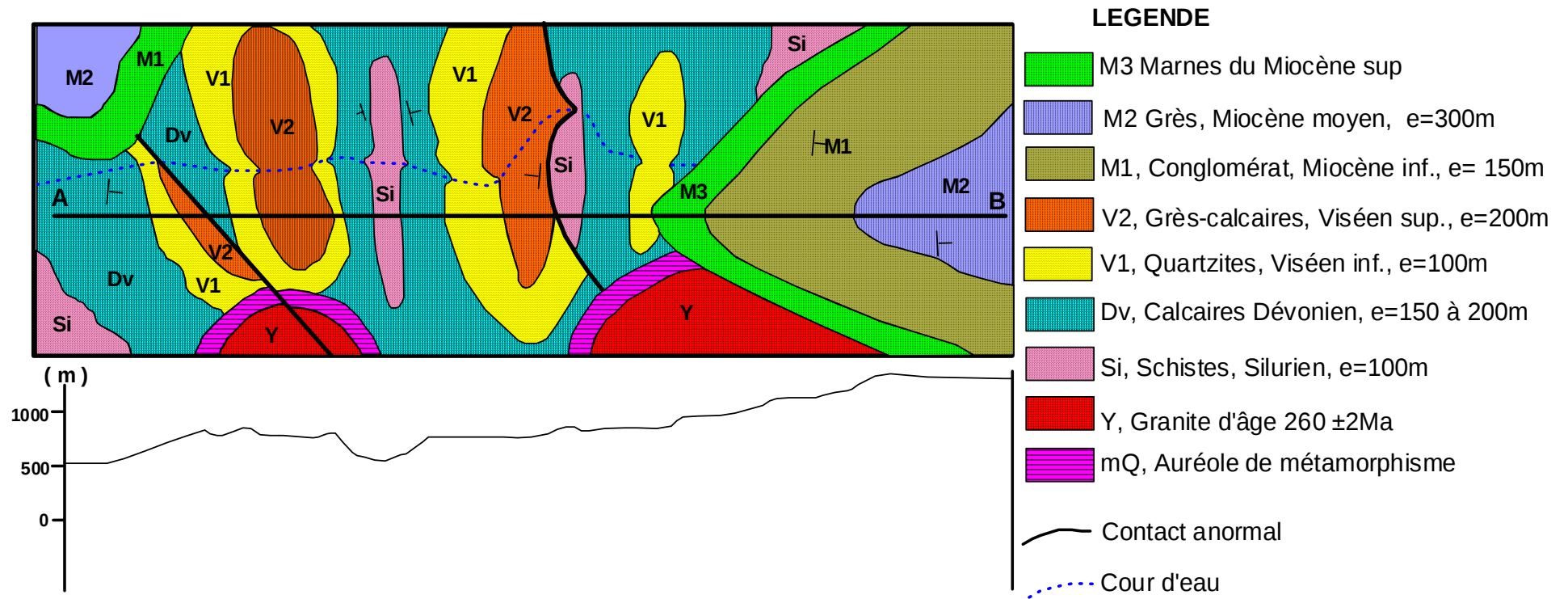


EL GARA 2



SIDI KHADDAJ

Echelle 1/50.000

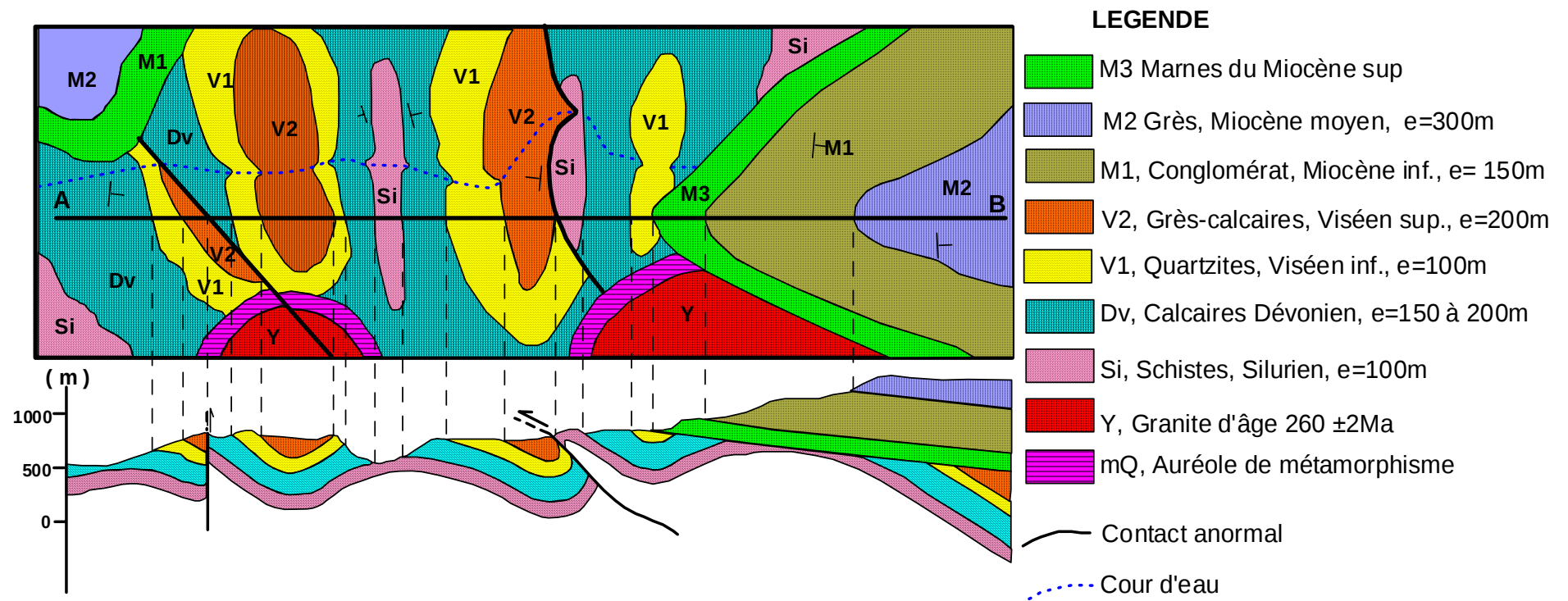


1) Réalisez la coupe AB.

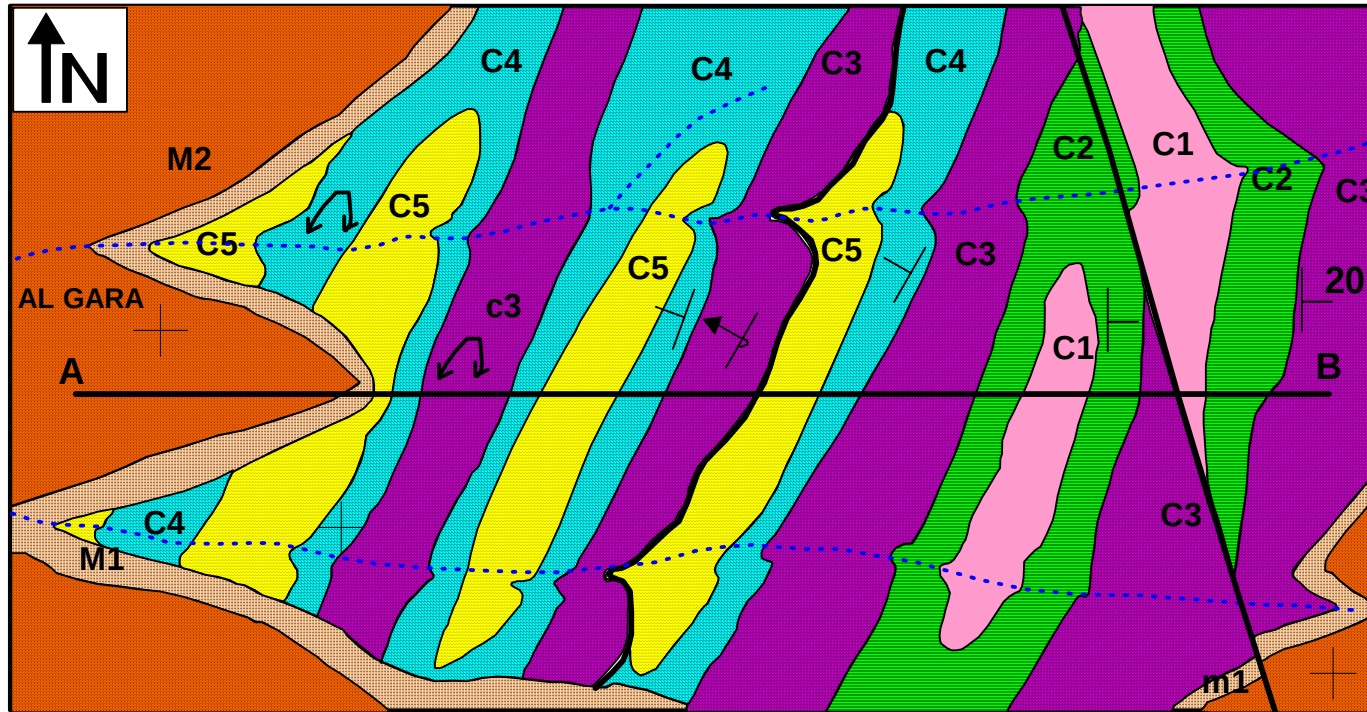
2) Dégager brièvement la nature et la chronologie des événements géologiques qui ont affecté cette région.

SIDI KHADDAJ

Echelle 1/50.000



Dessinez la coupe AB en utilisant le profil ci-dessous.



Légende

M2, Marnes, 300m

M1, Conglomérats, 100m

C5, Argiles, 200m

C4, Calcaire, 100m

C3, Quartzitizes, 250m

C2, Grès, 150m

C1, Grès-argiles, 200m

/ contact anormale

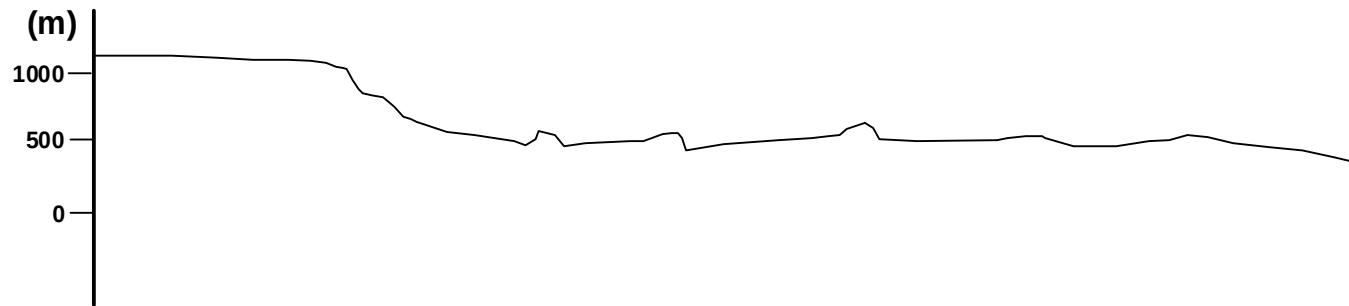
|—| pandage faible

|—| pandage fort

|—| pandage à l'envers

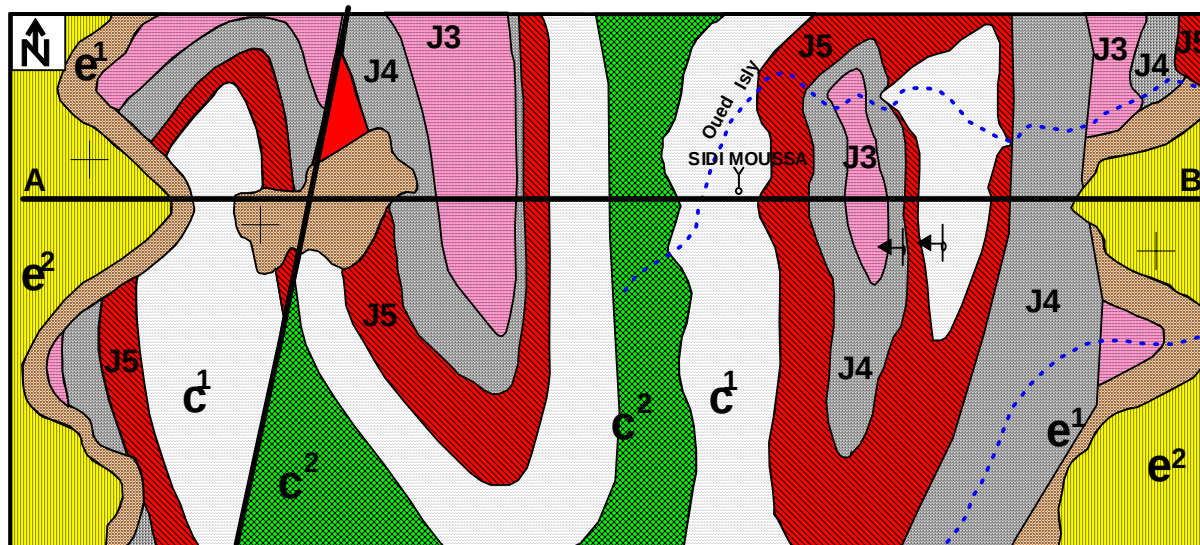
+ pandage horizontale

... oued



SIDI MOUSSA

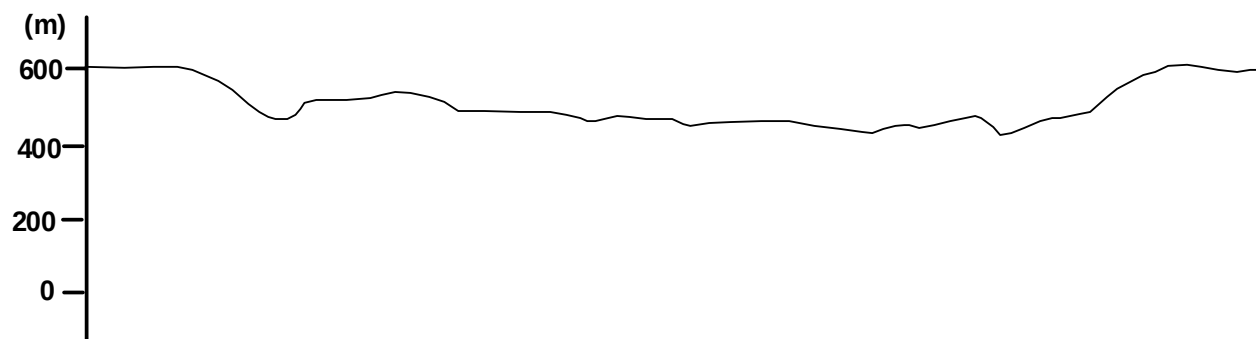
Echelle 1/50.000



LEGENDE

- e²  Thanétien- argiles gypsifères
- e¹  Montien- conglomérats (125m)
- c²  Barrémien-argiles gréseuses (300m)
- c¹  Néocomien - grès massifs (350m)
- J5  Portlandien - marnes vertes (150m)
- J4  Kimmeridgien - calcaires (100m)
- J3  Oxfordien - dolomies (75m)

-  Contour géologique
-  Réseau hydrographique
-  Couche horizontale
-  pendage à l'envers



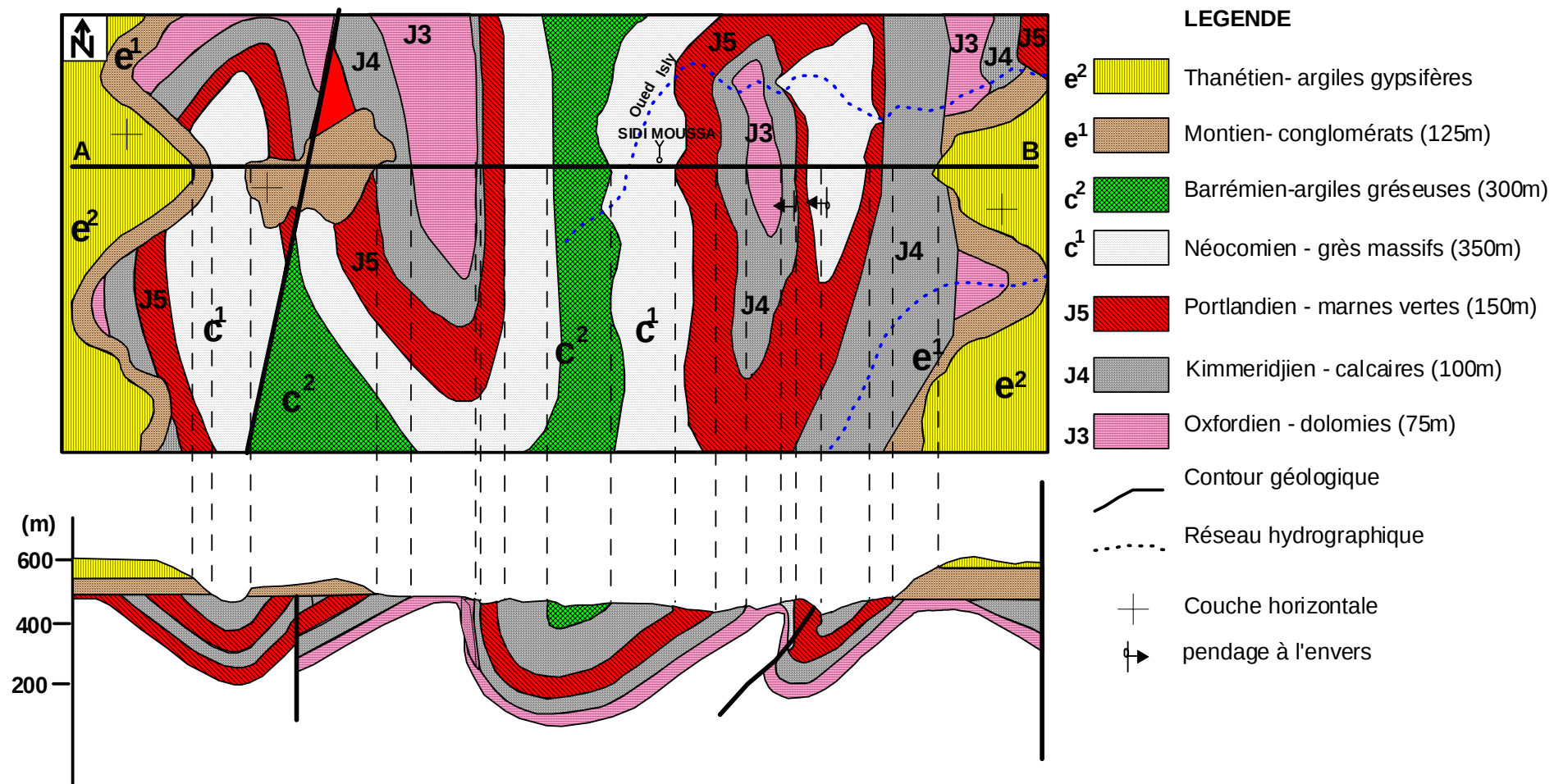
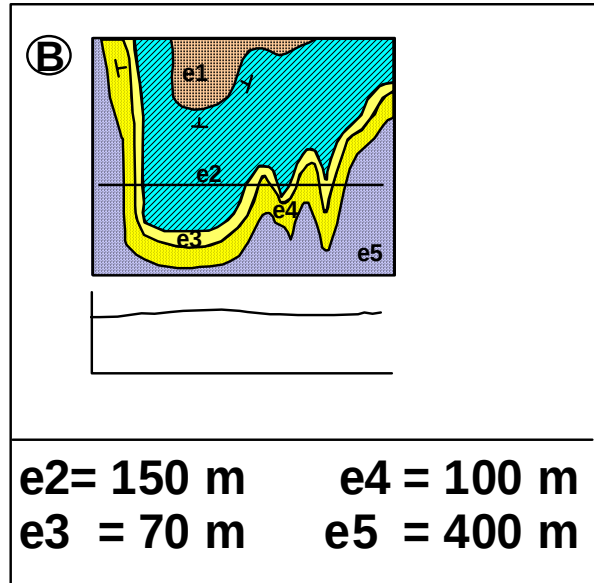
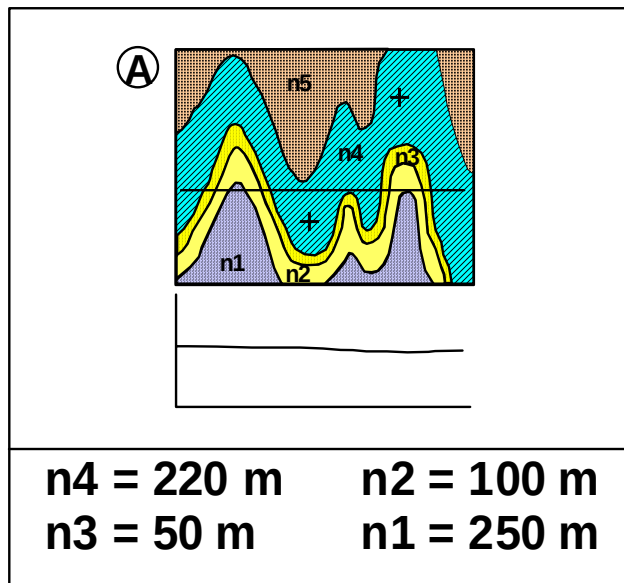
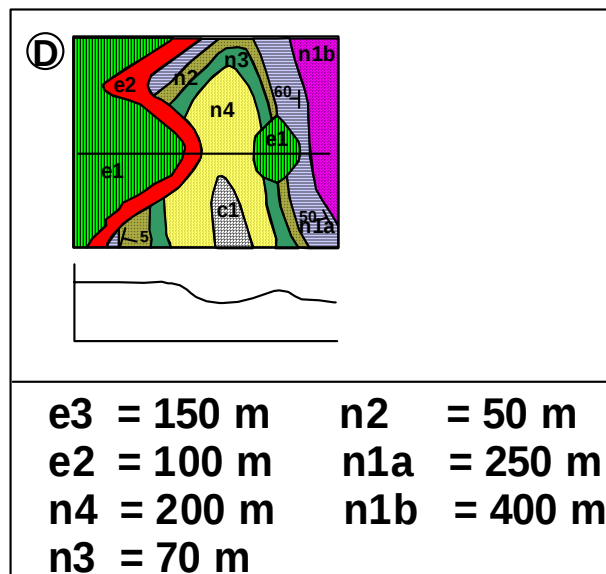
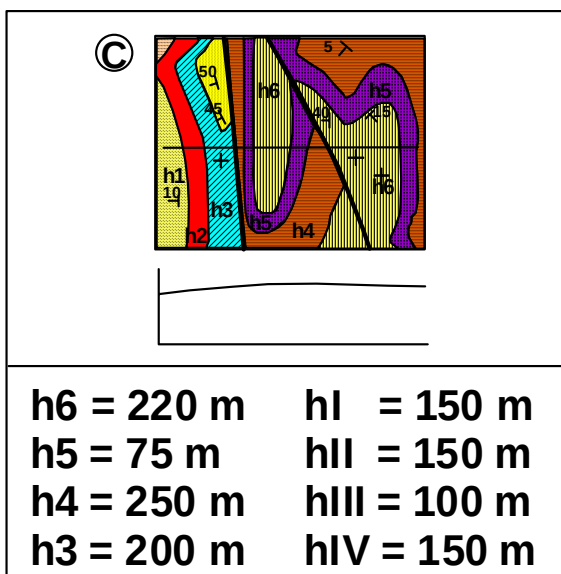


PLANCHE II



Tenir compte de la forme des terminaisons péricleinales.



Echelle : 1/50.000

PLANCHE I

Déterminer, dans chacun des cas, le pendage des plans (sens et valeur angulaire)
Echelle : 1/50.000

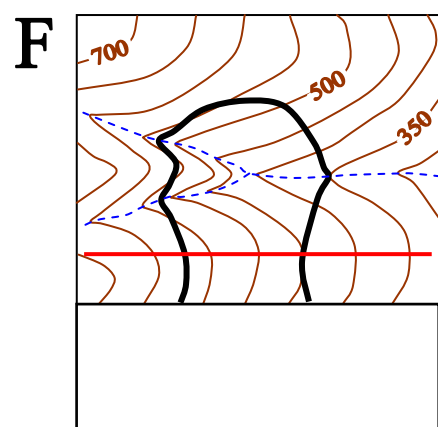
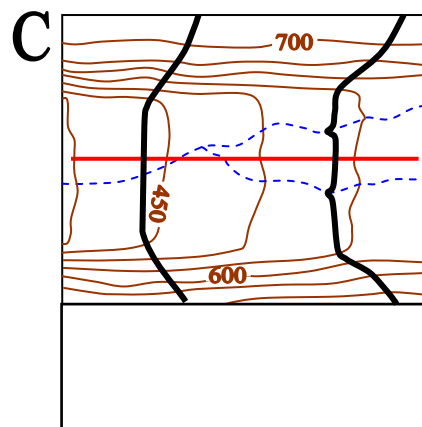
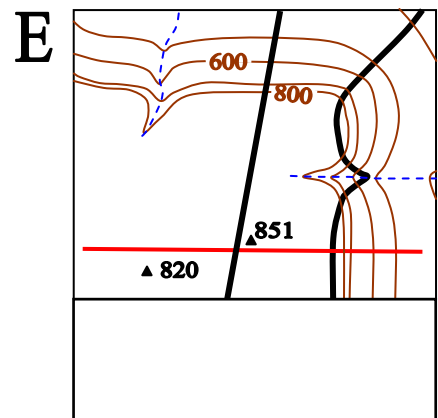
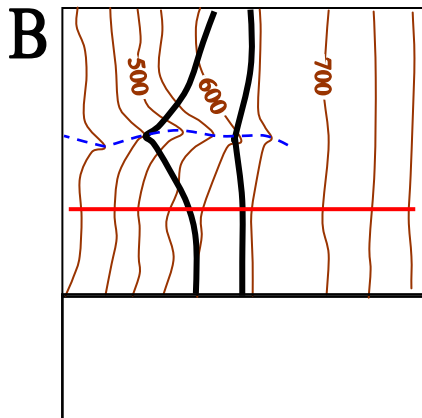
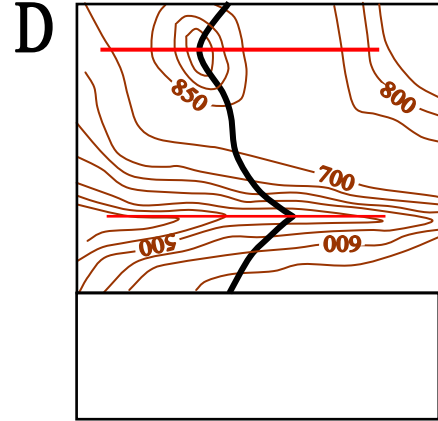
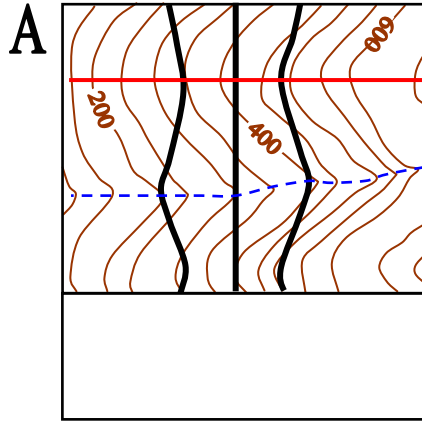
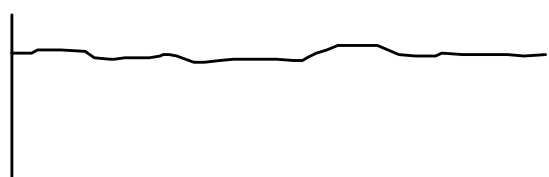
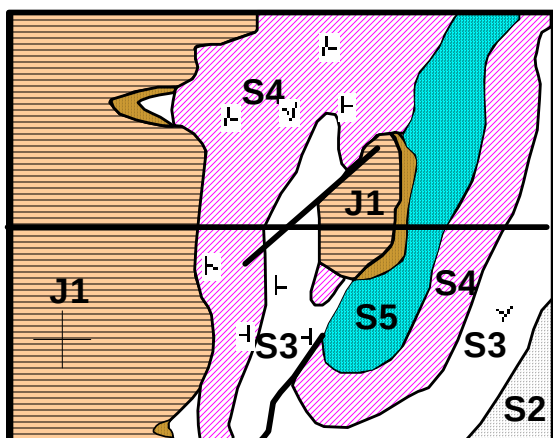


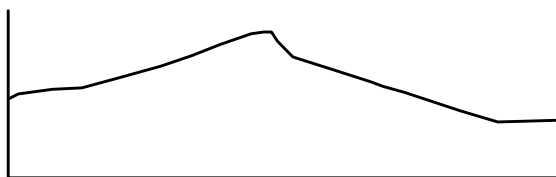
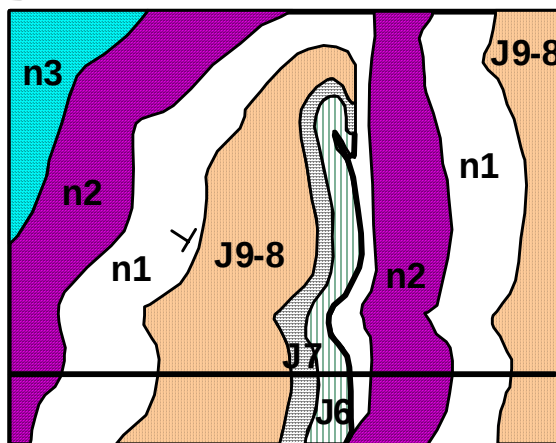
PLANCHE III

A



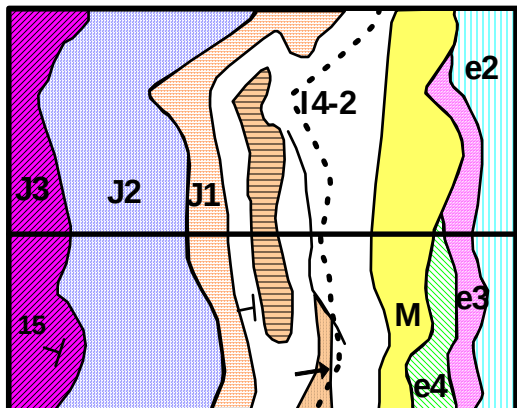
J4 = 150m	S4 = 130m
t = 0 à 50m	S3 = 80m
S5 = 50m	

B



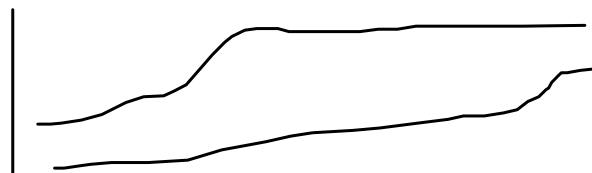
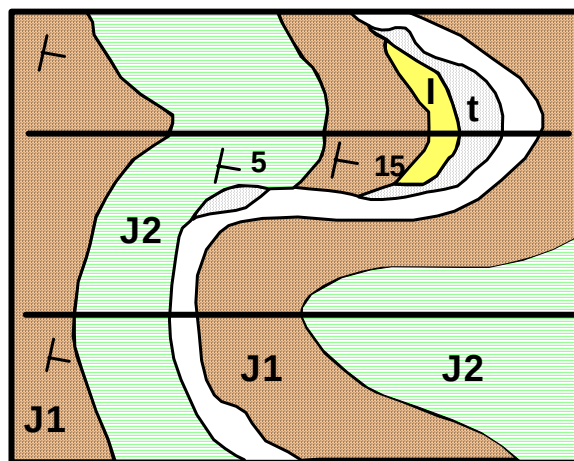
n2 = 100 m	J7 = 100 m
n1 = 150 m	J6 = 150 m
J9-8 = 170 m	

C



M = 200 m	J2 = 180 m
e4 = 150 m	J1 = 150 m
e3 = 100 m	J4-2 = 120 m
e2 = 250 m	I1 = 150 m
J3 = 150 m	

D

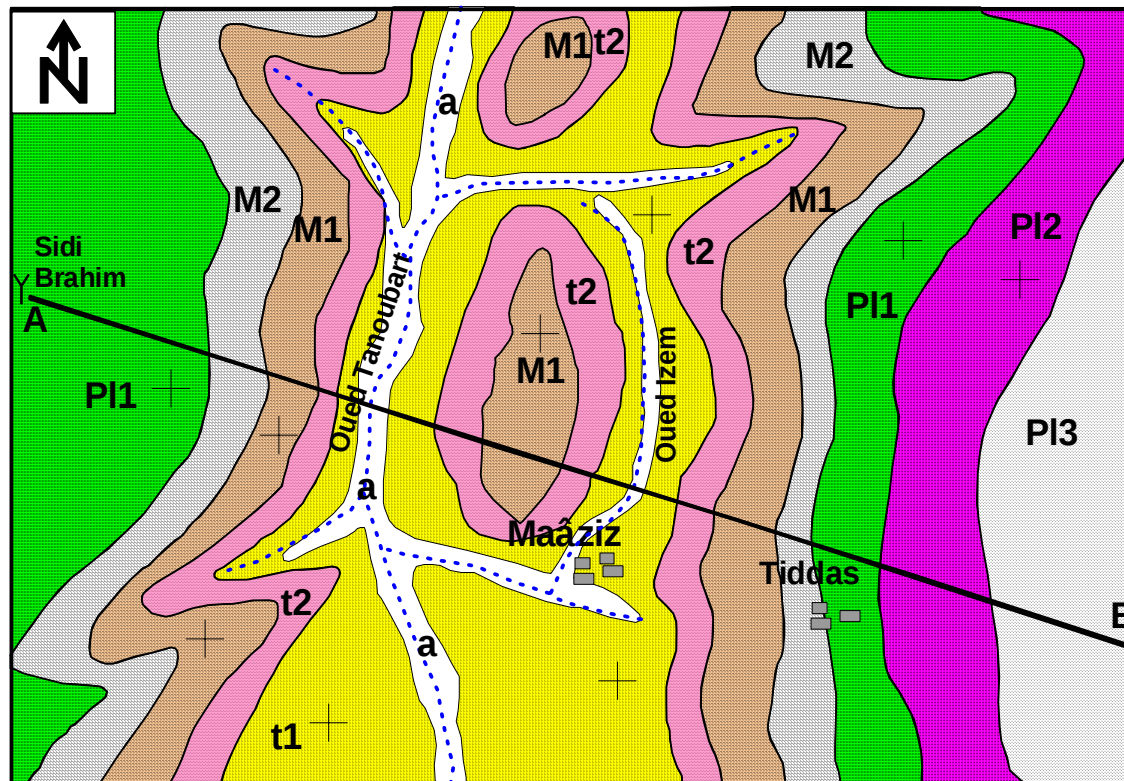


J2 = 250 m	I = 120 m
J1 = 200 m	t = variable

Echelle : 1/50.000

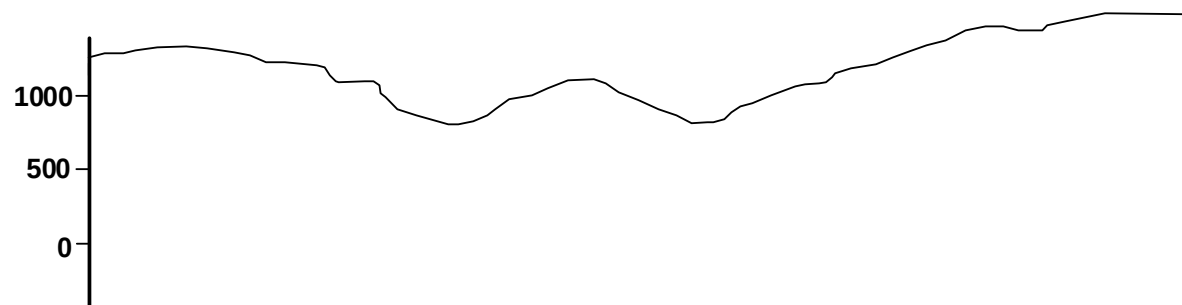
MAAZIZ

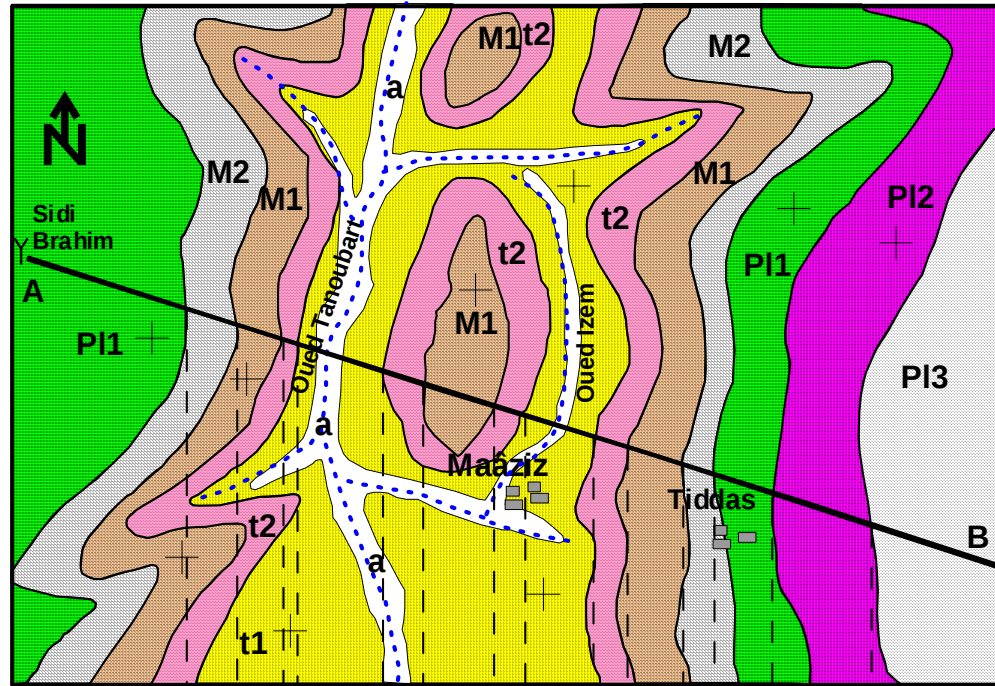
Echelle 1/50.000



LEGENDE

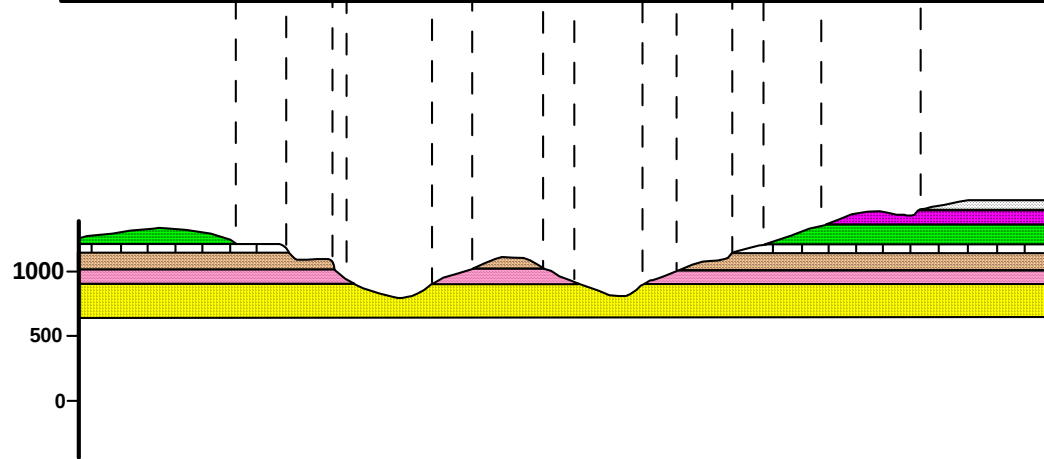
-  a-Alluvions quaternaires
-  PI3-Pliocène sup.: grès, 120m
-  PI2-Pliocène moyen: Conglomérat, 100m
-  PI1-Pliocène inférieur: Argiles, 200m
-  m2-Miocène supérieur: Calcaires, 50m
-  m1-Miocène inférieur: Marnes, 150m
-  t2-Trias supérieur: Grès argileux, 100m
-  t1-Trias inférieur: Argilites, 150m
-  Contour géologique
-  Réseau hydrographique
-  Couche horizontale



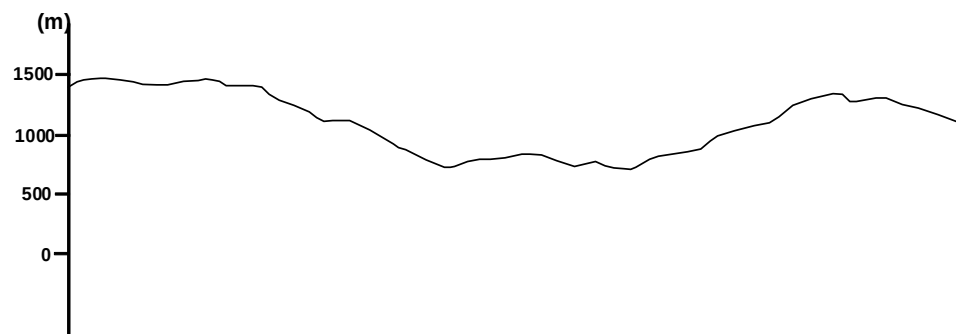
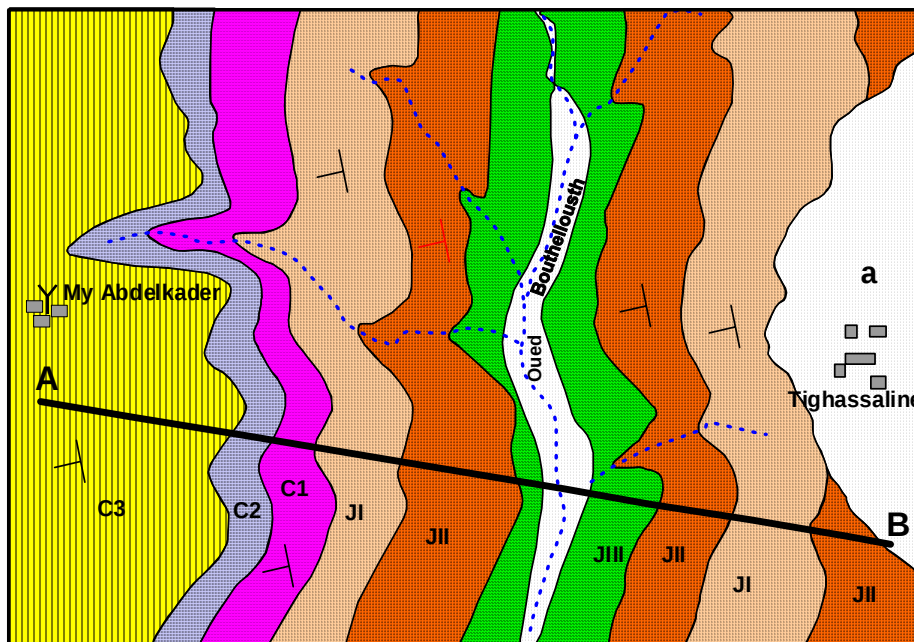


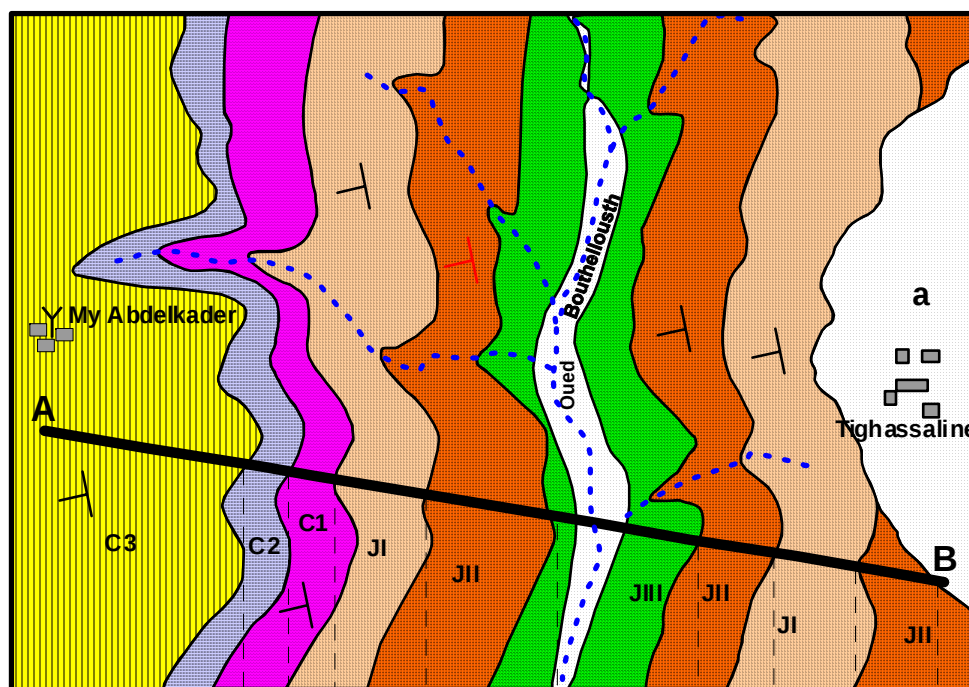
LEGENDE

-  a-Alluvions quaternaires
-  PI3-Pliocène sup.: grès, 120m
-  PI2-Pliocène moyen: Conglomérat, 100m
-  PI1-Pliocène inférieur: Argiles, 200m
-  m2-Miocène supérieur: Calcaires, 50m
-  m1-Miocène inférieur: Marnes, 150m
-  t2-Trias supérieur: Grès argileux, 100m
-  t1-Trias inférieur: Argilites, 150m
-  Contour géologique
-  Réseau hydrographique
-  Couche horizontale

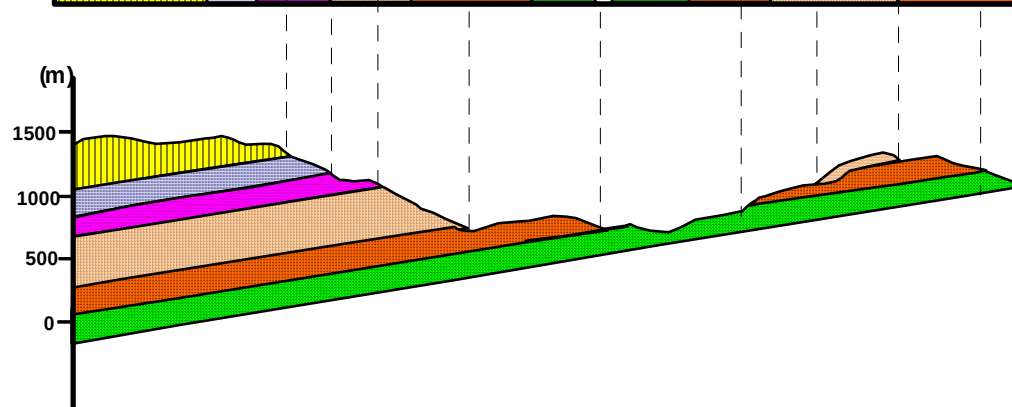


TIGHBOULA échelle 1/50.000



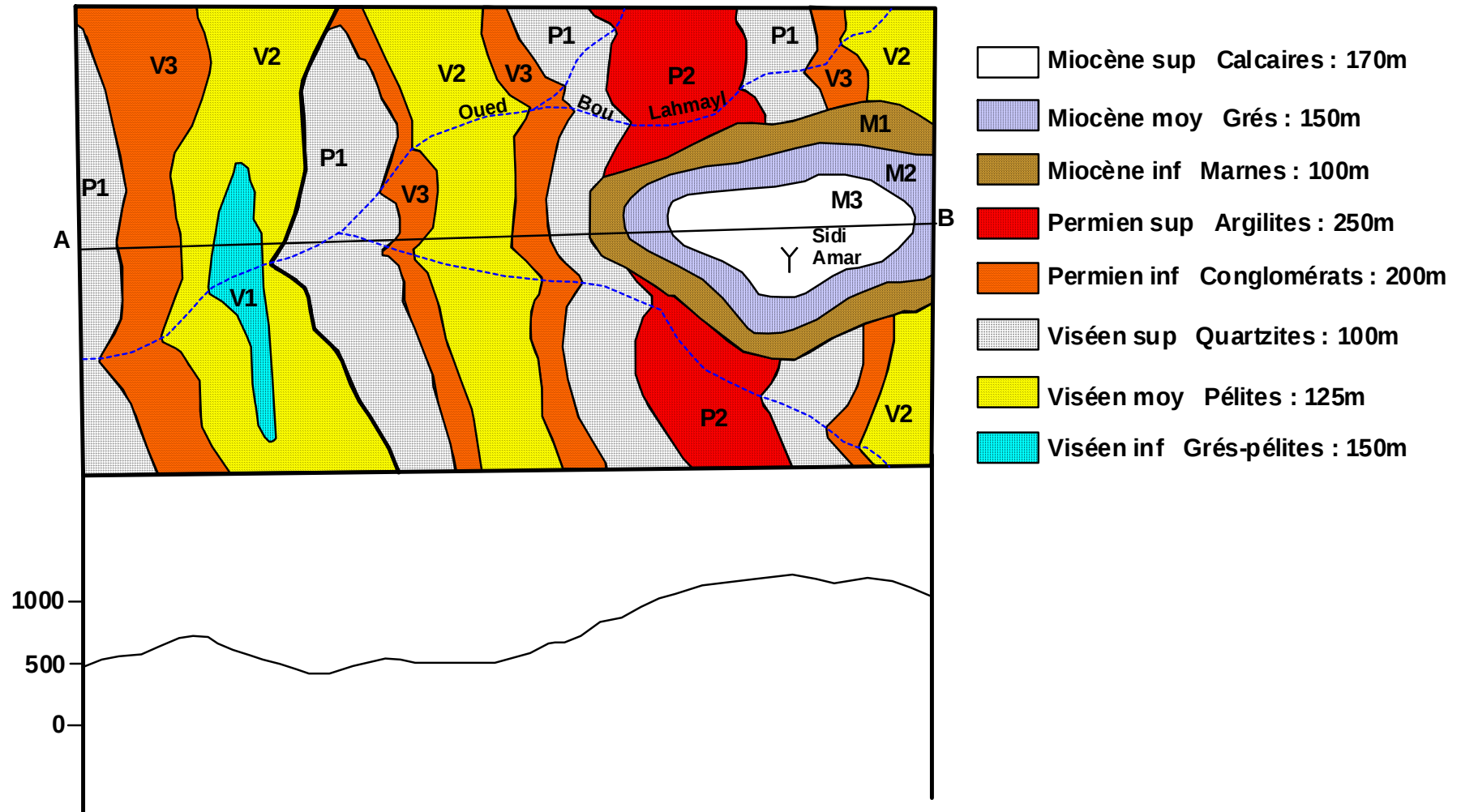


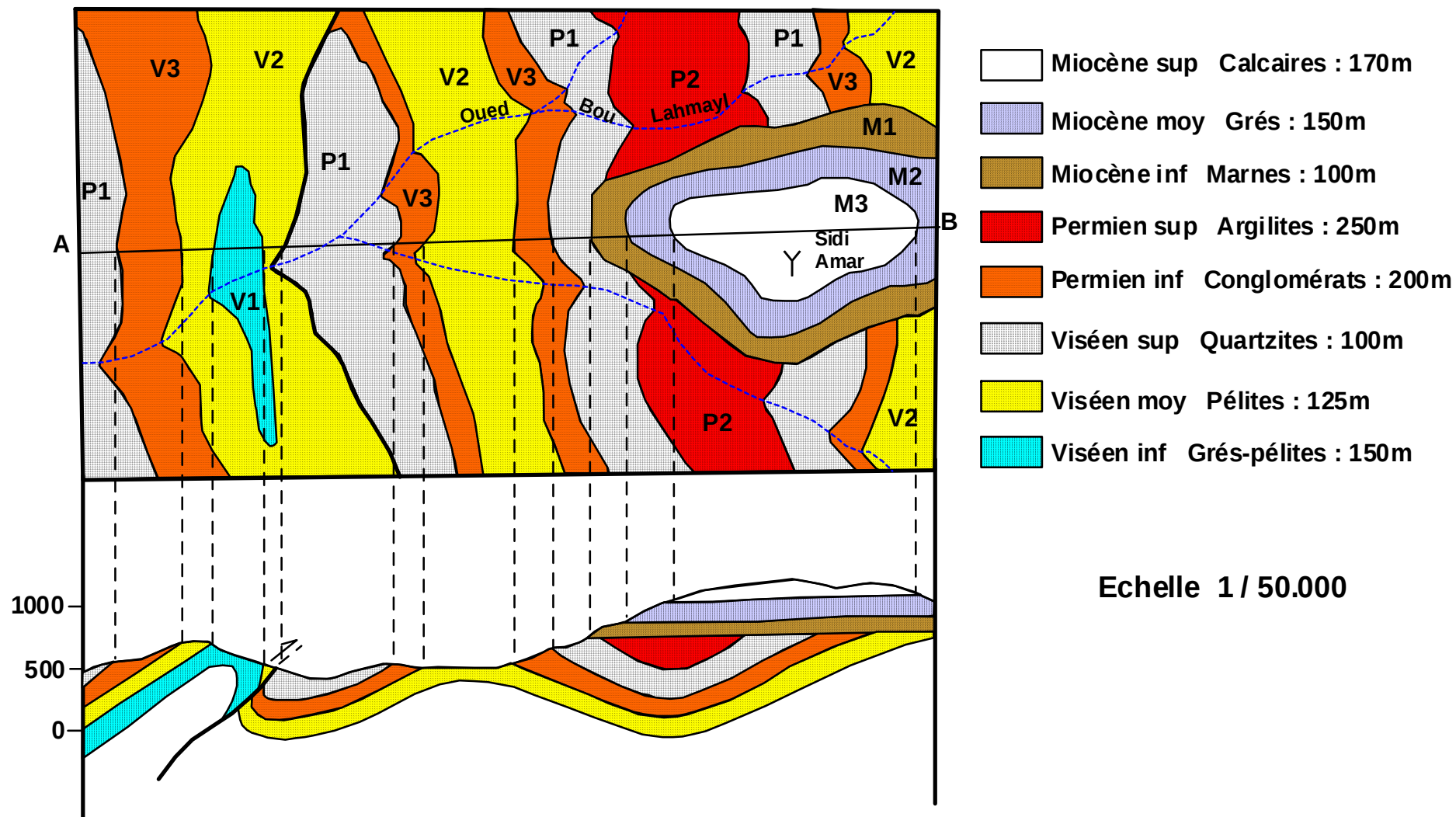
- a : Alluvions modernes
- C3 : Crétacé sup. : calcaire marneux : 250m
- C2 : Crétacé moyé n ; marnes grise : 250m
- C1 : Crétacé inférieur ; grès : 200m
- C1 : Jurassique supérieur ; argiles : 450m
- JII : Jurassique moyen ; calcaires : 150m
- JII : Jurassique inférieur ; marnes : 300m
- Cours d'eau
- Pendage



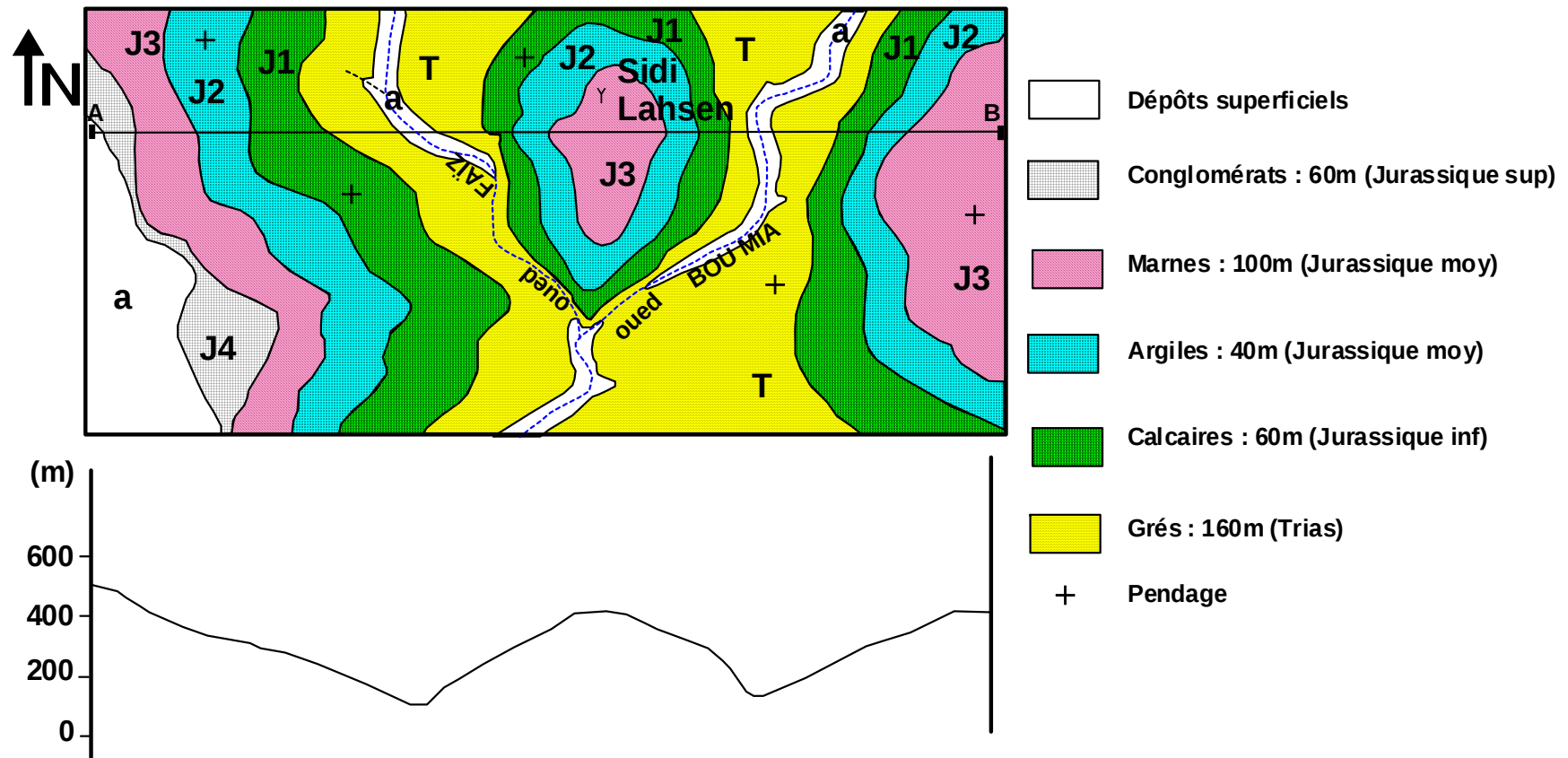
SIDI AMAR

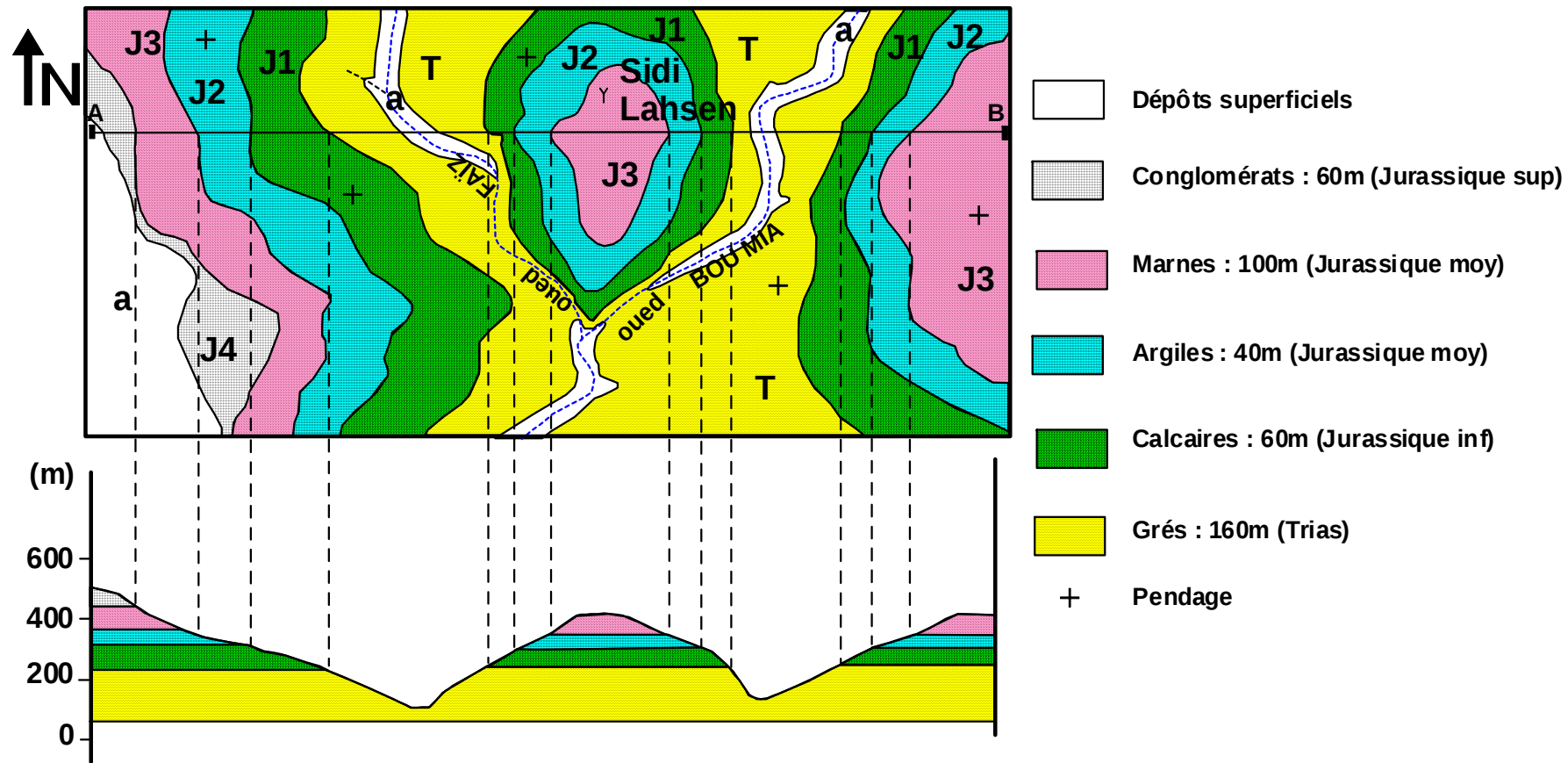
Echelle : 1/50.000





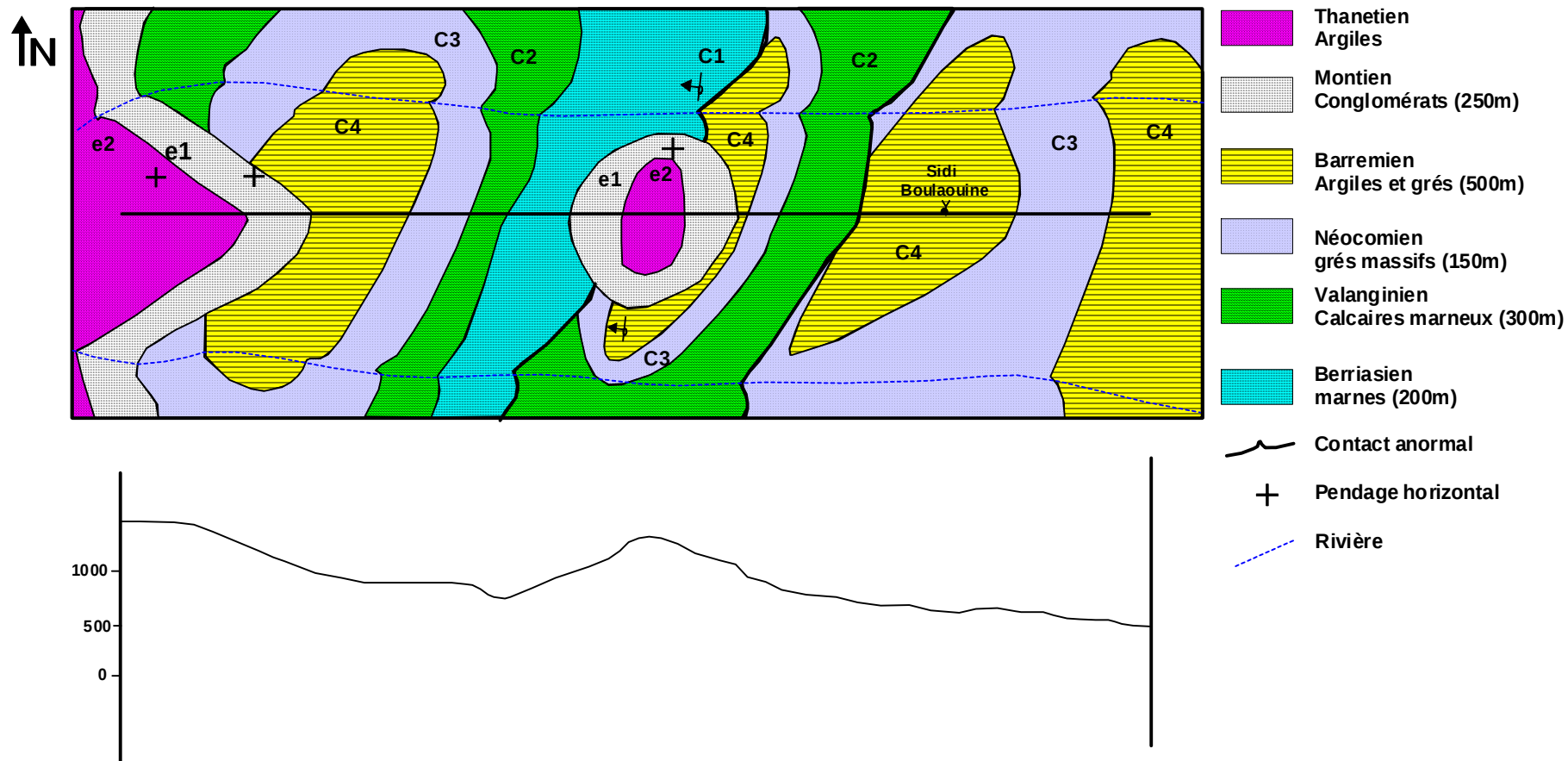
Sidi Lahsen au 1/20.000



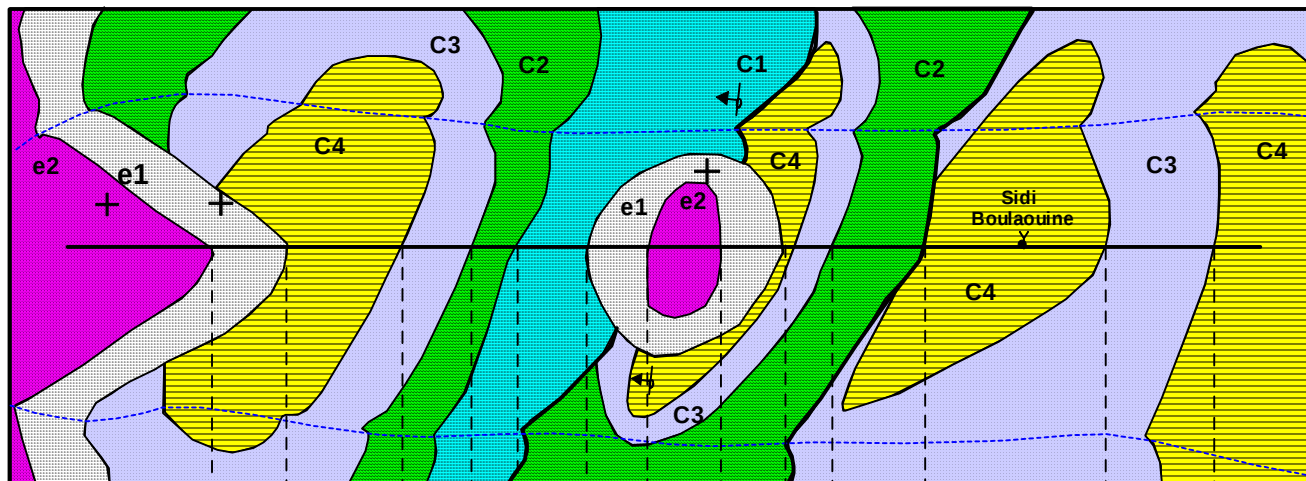


Sidi Boulaouine

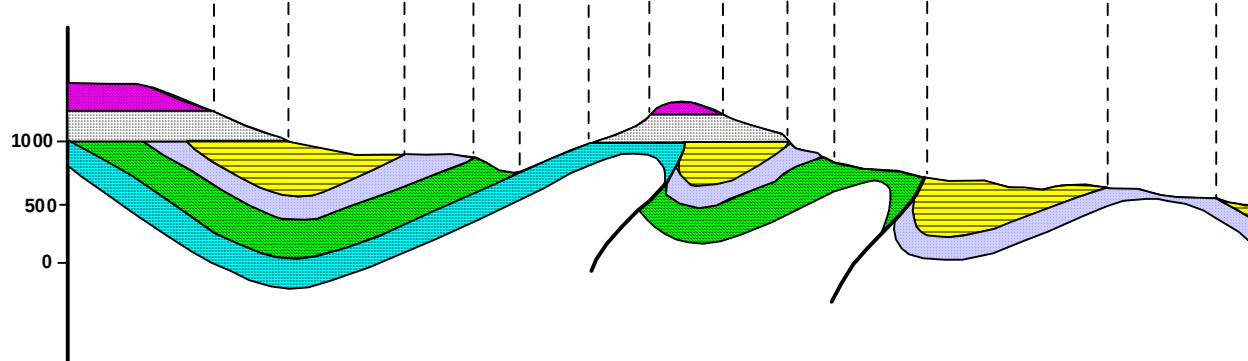
Echelle 1 / 50.000



↑ N



- Thanetien Argiles
- Montien Conglomérats (250m)
- Barremien Argiles et grés (500m)
- Néocomien grés massifs (150m)
- Valanginien Calcaires marneux (300m)
- Berriasien marnes (200m)
- Contact anormal
- + Pendage horizontal
- Rivière



LEGENDE

Quaternaire

β Basalte

Pliocène inférieur

PL3 Calcaires coquilliers 300m

PL2 Marnes blanches 100m

PL1 Conglomérats 150m

Oligocène

Granite et métamorphique

Crétacé

C3 Argiles rouges 350m

C2 Calcaires à Rudistes 225m

C1 Grés fins glauconieux 250m

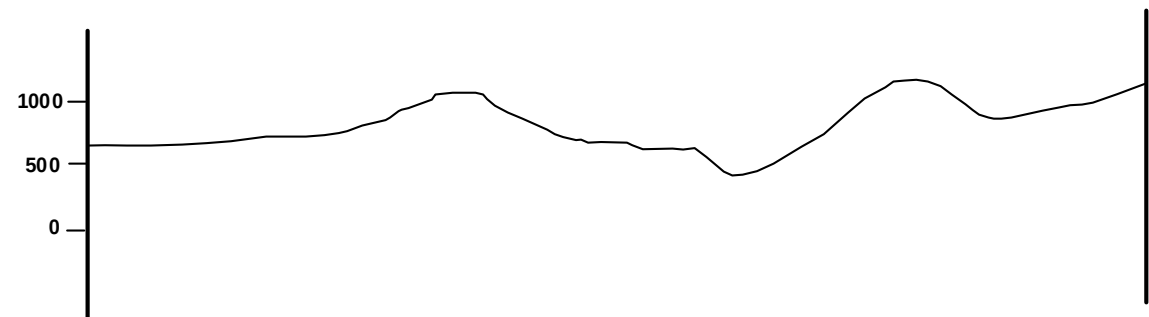
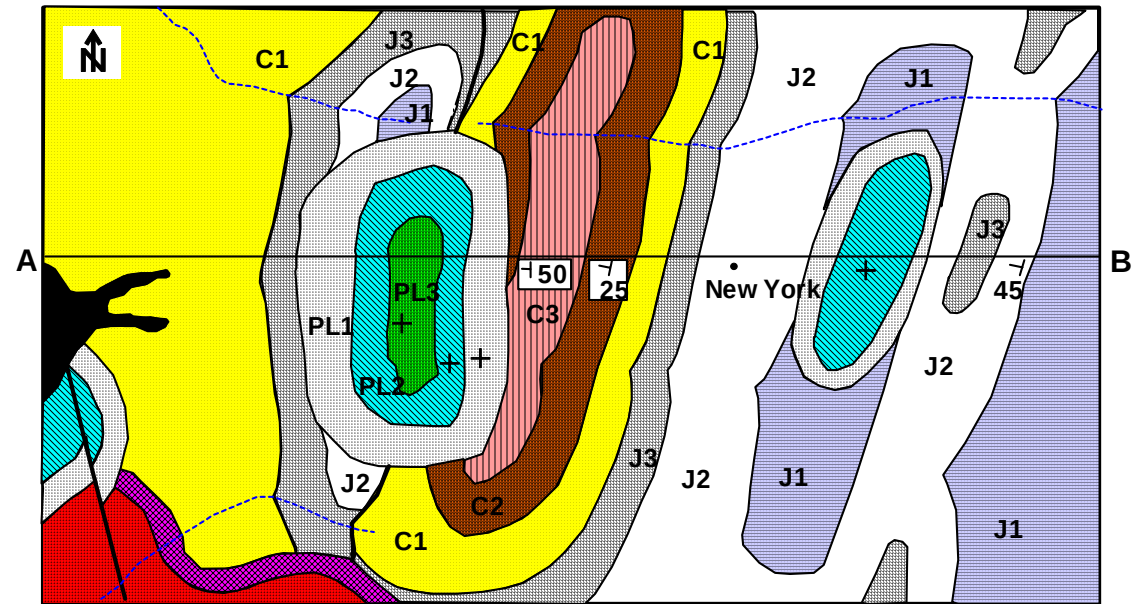
Jurassique

J1 Calcaires lithostratigraphiques 200m

J2 Marnes à Spongiaires 175m

J3 Dolomies cristallins 200m

+ Pendage horizontal



LEGENDE

Quaternaire

β Basalte

Pliocène inférieur

PL3 Calcaires coquilliers 300m

PL2 Marnes blanches 100m

PL1 Conglomérats 150m

Oligocène

Granite et métamorphique

Crétacé

C3 Argiles rouges 350m

C2 Calcaires à Rudistes 225m

C1 Grés fins glauconieux 250m

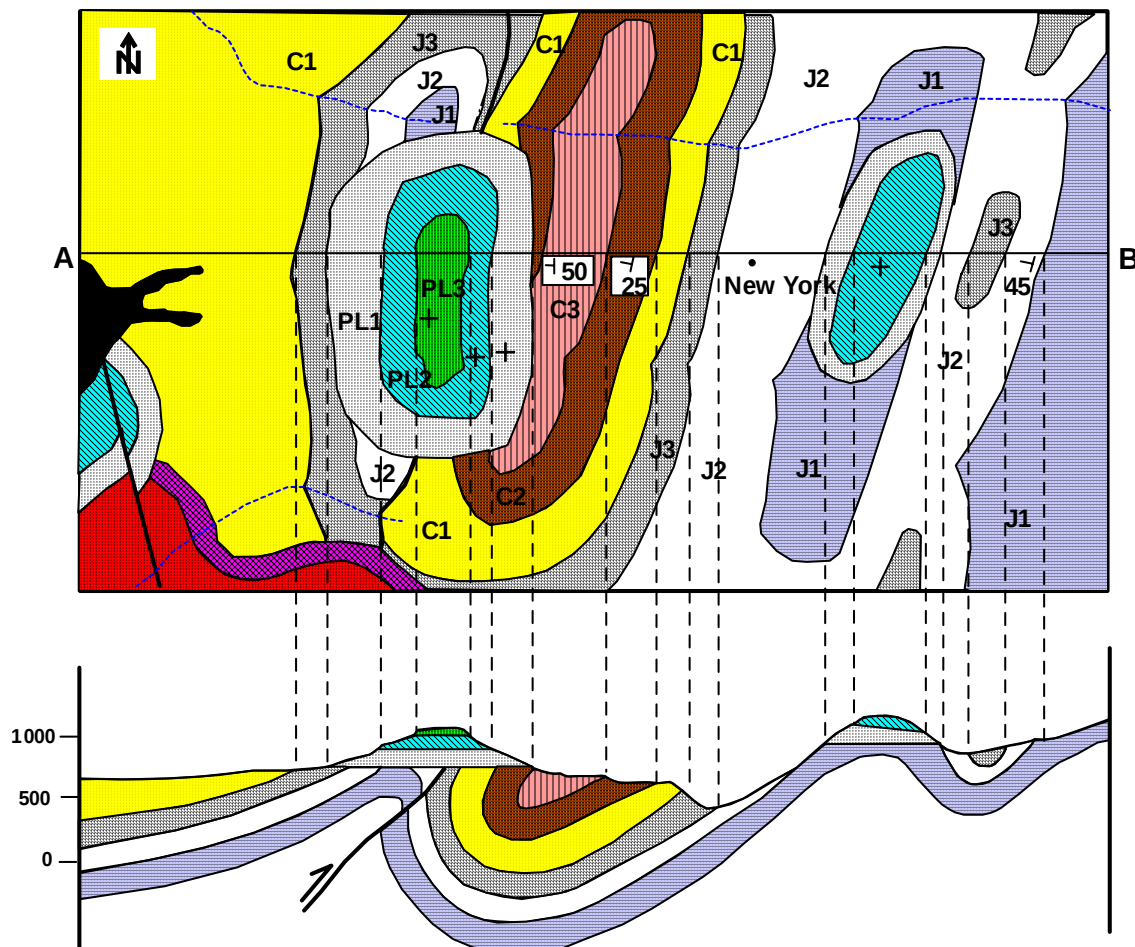
Jurassique

J1 Calcaires lithostratigraphiques 200m

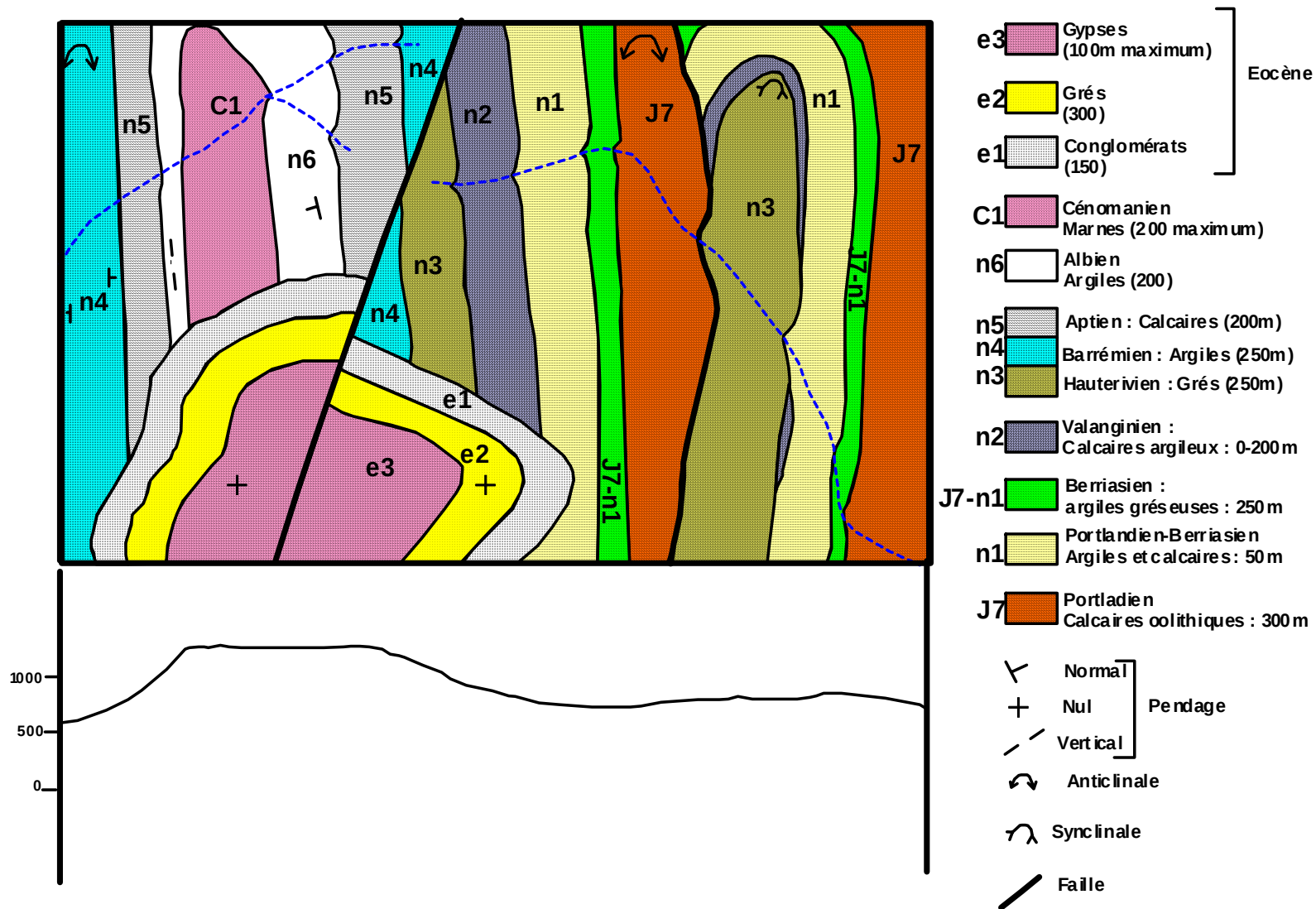
J2 Marnes à Spongiaires 175m

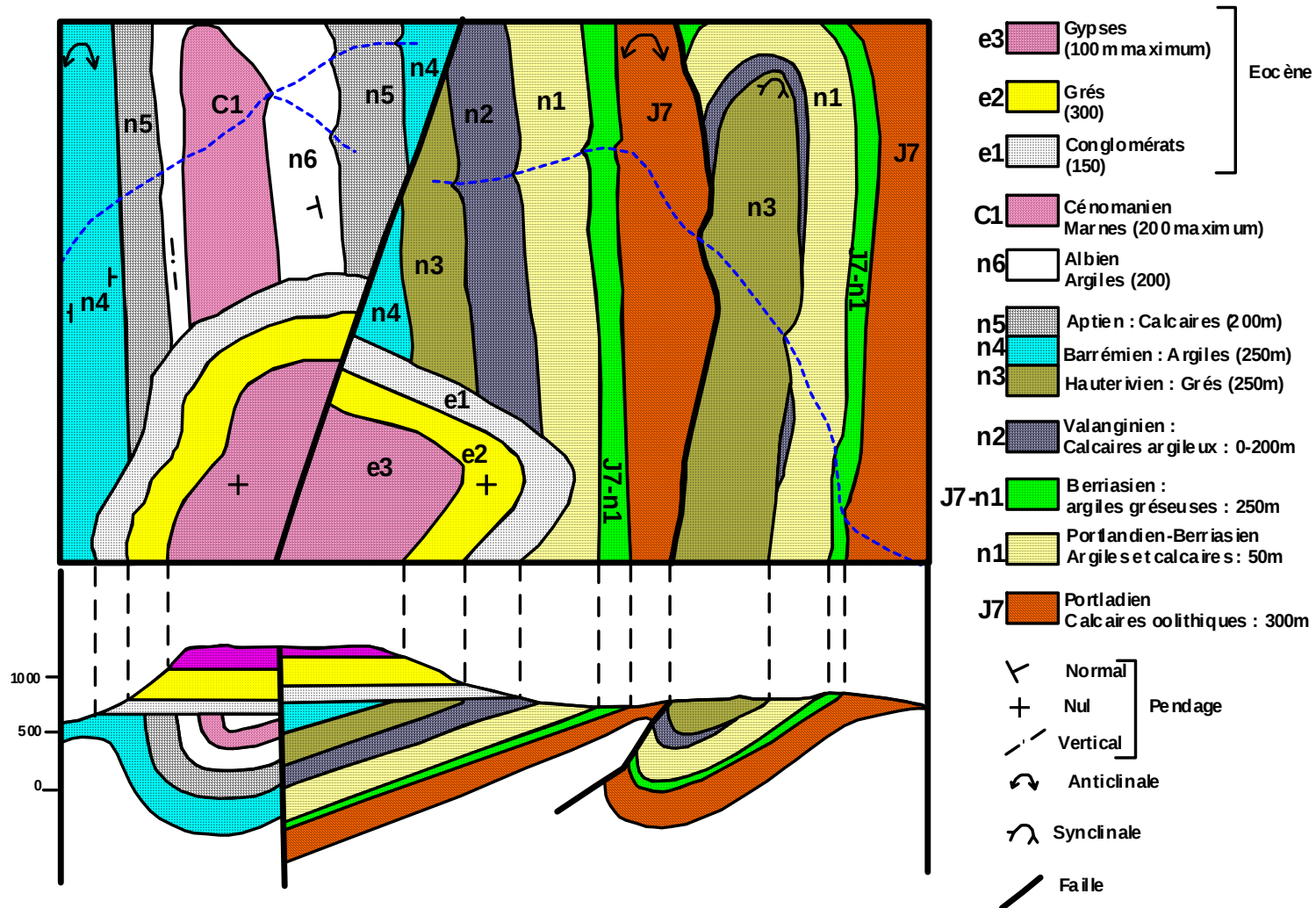
J3 Dolomies cristallins 200m

+ Pendage horizontal



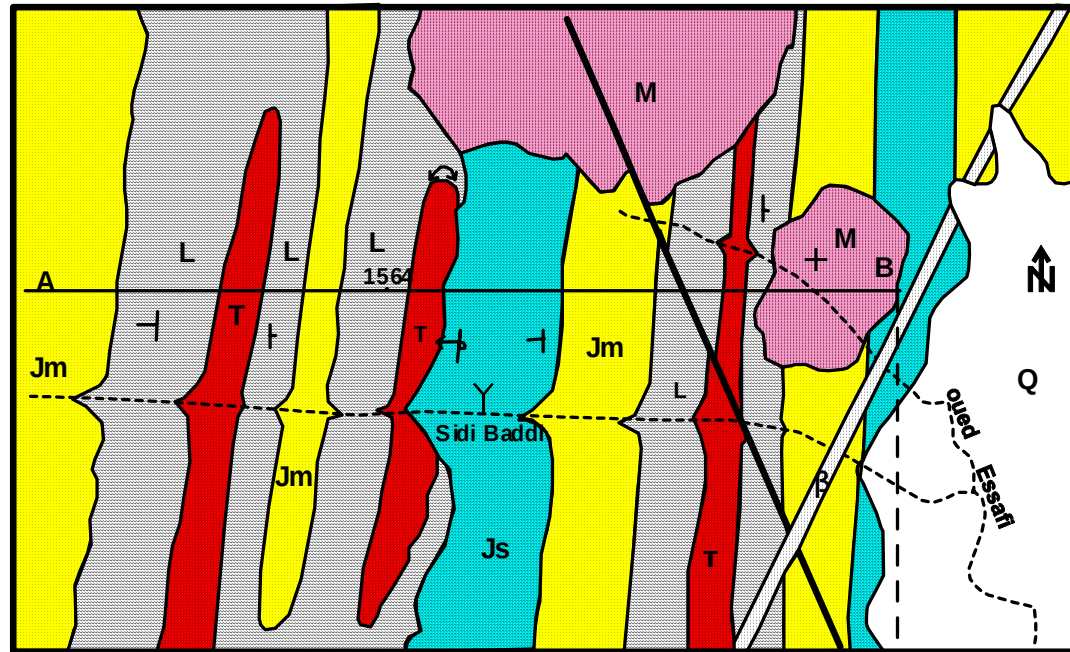
SIDI EL KEBDANI ECHELLE 1/50.000





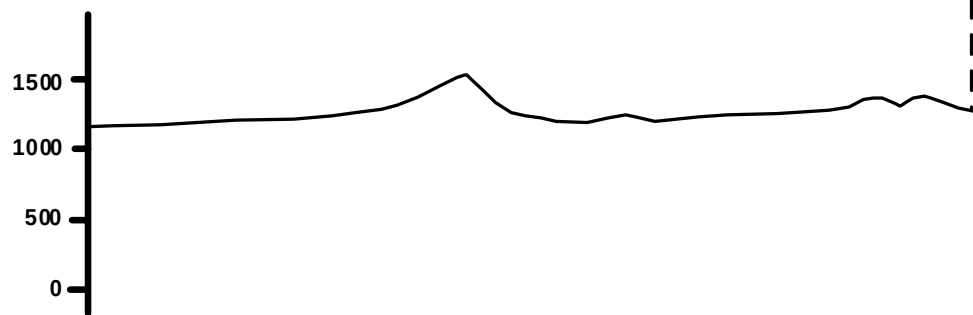
SIDI BADDI

ECHELLE 1 / 50.000

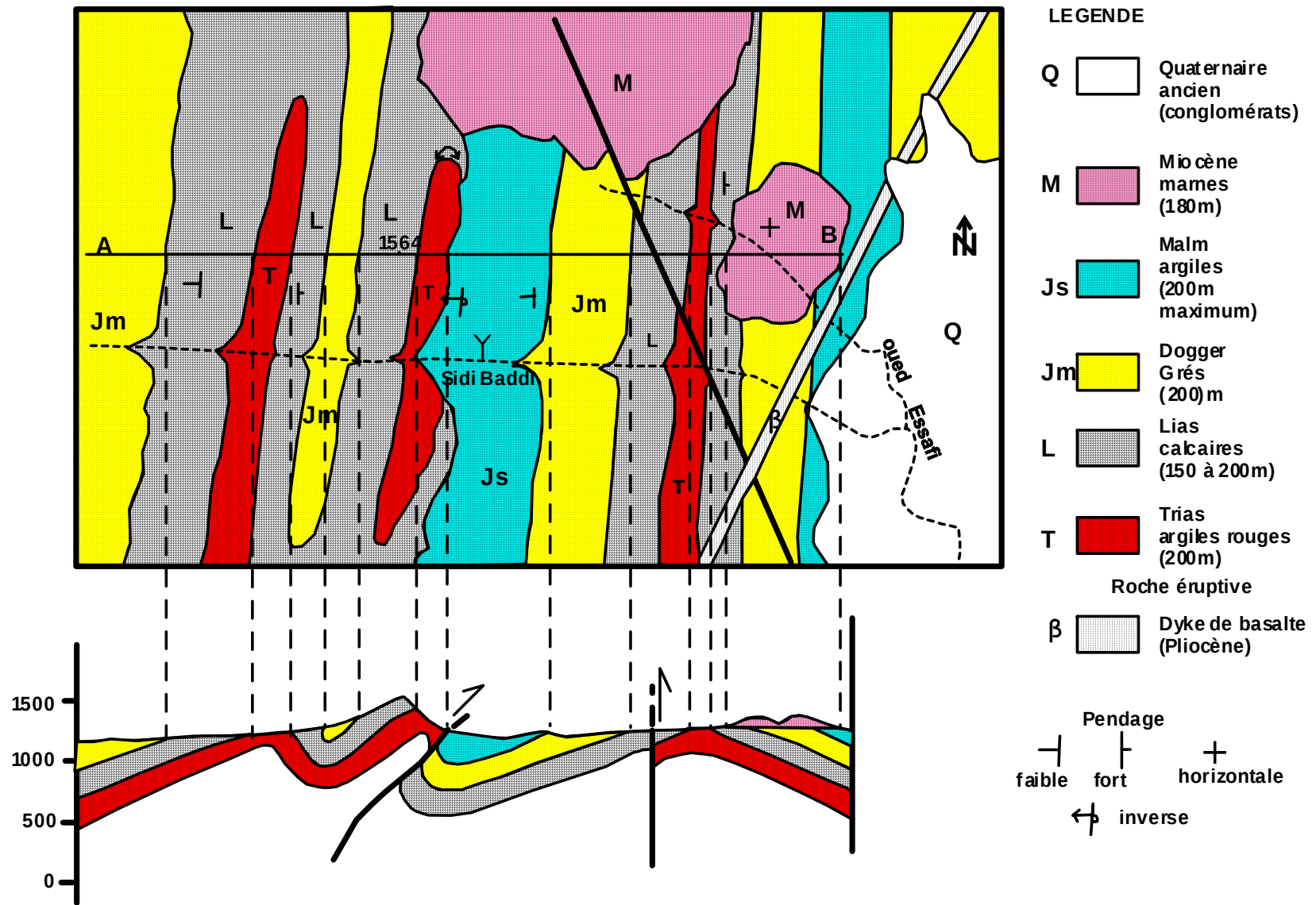


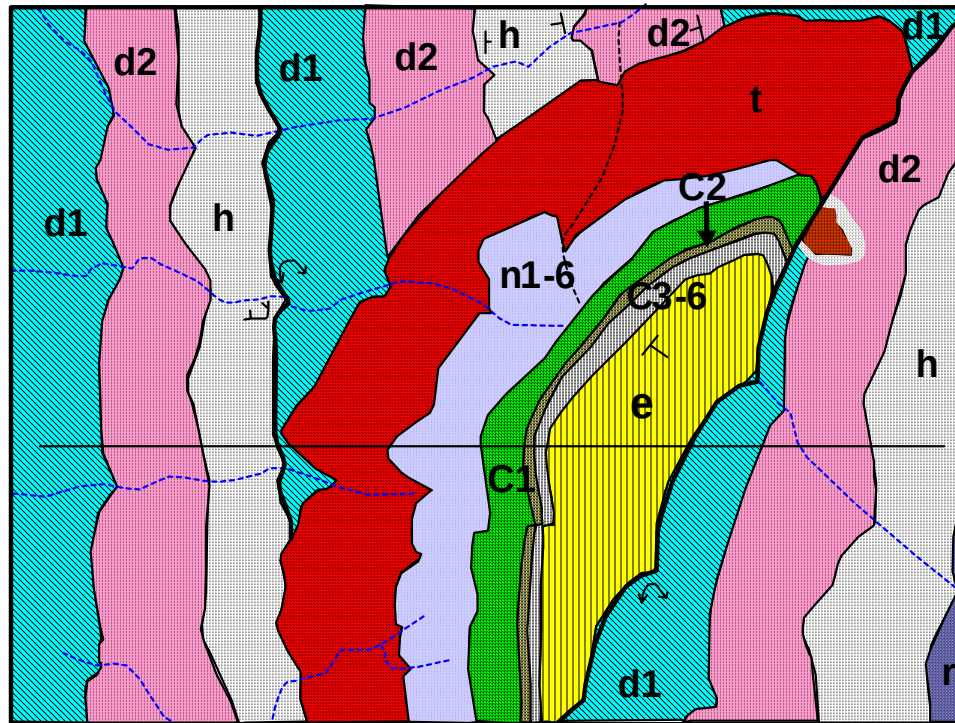
LEGENDE

- Q Quaternaire ancien (conglomérats)
- M Miocène marnes (180m)
- Js Malm argiles (200m maximum)
- Jm Dogger Grés (200m)
- L Lias calcaires (150 à 200m)
- T Trias argiles rouges (200m)
- Roche éruptive
- β Dyke de basalte (Pliocène)



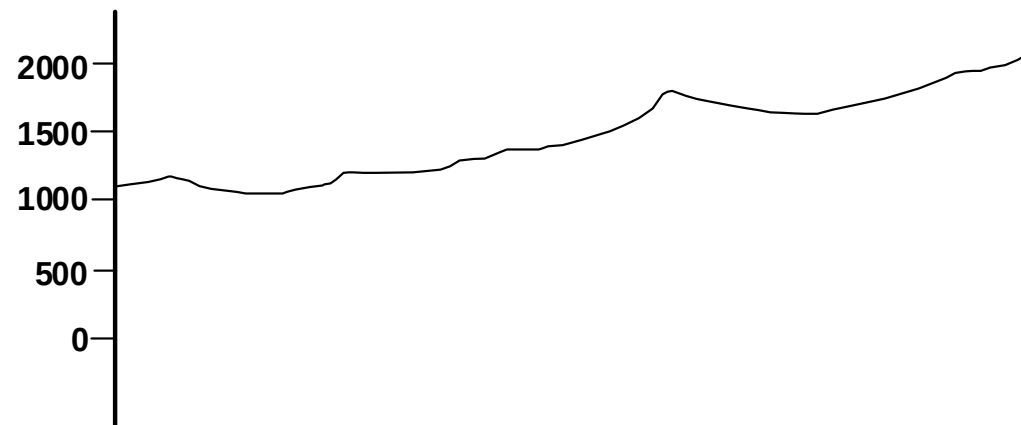
- Pendage
- faible
- fort
- horizontale
- inverse

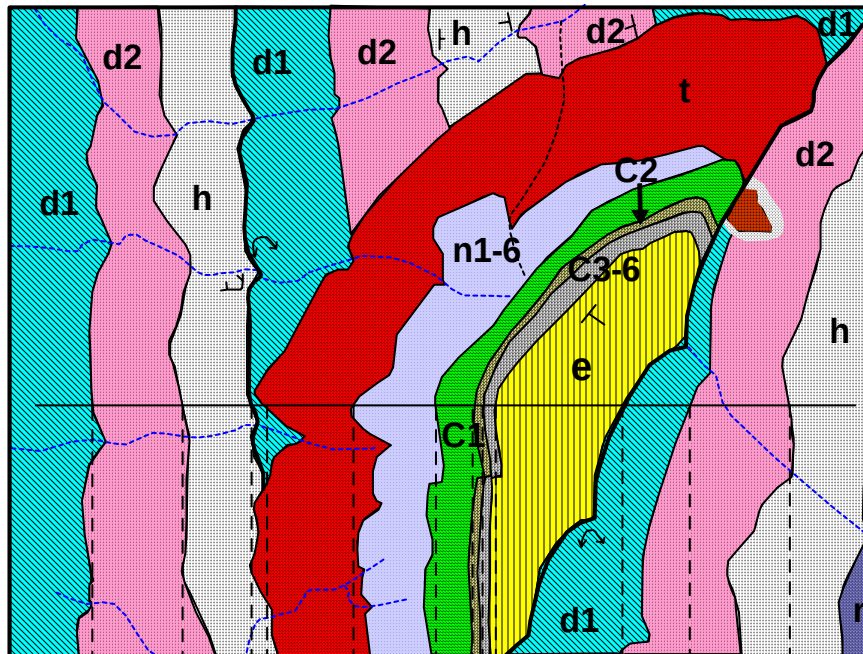




LEGENDE

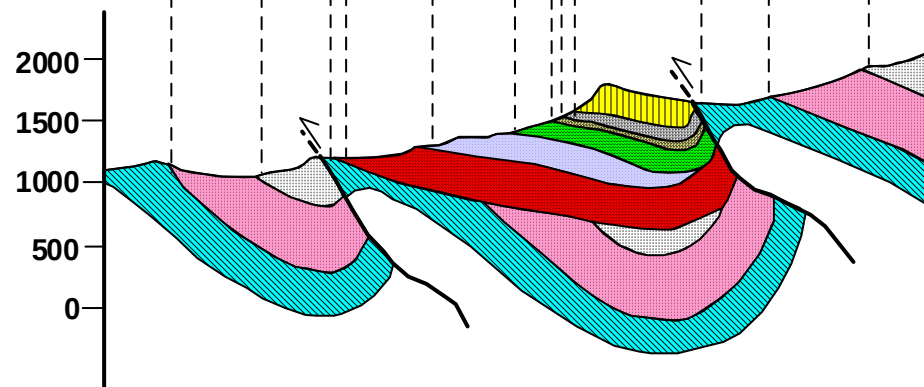
-  Eocène
calcaires gréseux (200m)
-  Crétacé supérieur
calcaires (75 à 100m)
-  Turonien
calcaires durs (50m)
-  Cénomanién
calcaires marneux (150 à 200m)
-  Crétacé inférieur
marnes et grés (0 à 300m)
-  Trias
argiles rouges (300m)
-  Permien
grés
-  Carbonifère
conglomérats (550m)
-  Dévonien supérieur
dolomies (500m)
-  Dévonien inférieur
schistes (300m)
-  Granite
(avec auréole)
-  Pendage faible
-  Couches verticales



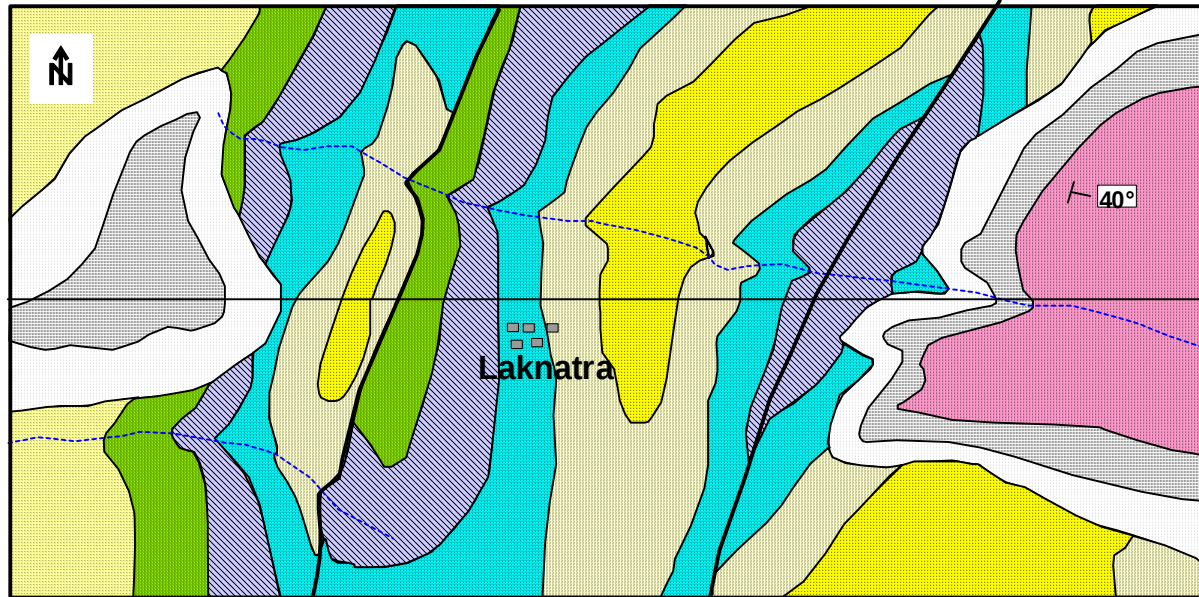


LEGENDE

-  Eocène
calcaires gréseux (200m)
-  Crétacé supérieur
calcaires (75 à 100m)
-  Turonien
calcaires durs (50m)
-  Cénomanién
calcaires marneux (150 à 200m)
-  Crétacé inférieur
marnes et grés (0 à 300m)
-  Trias
argiles rouges (300m)
-  Permien
grés
-  Carbonifère
conglomérats (550m)
-  Dévonien supérieur
dolomies (500m)
-  Dévonien inférieur
schistes (300m)
-  Granite
(avec auréole)
-  Pendage faible
-  Couches verticales

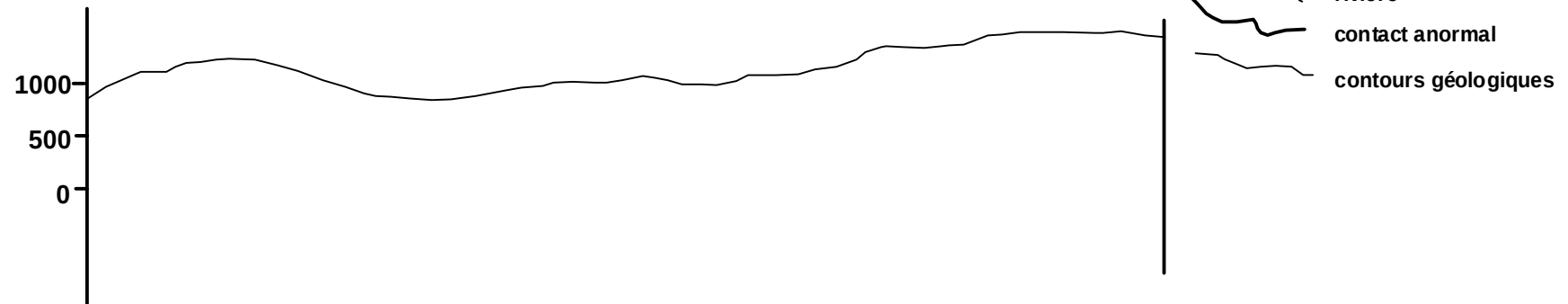


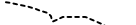
Echelle 1 / 50.000

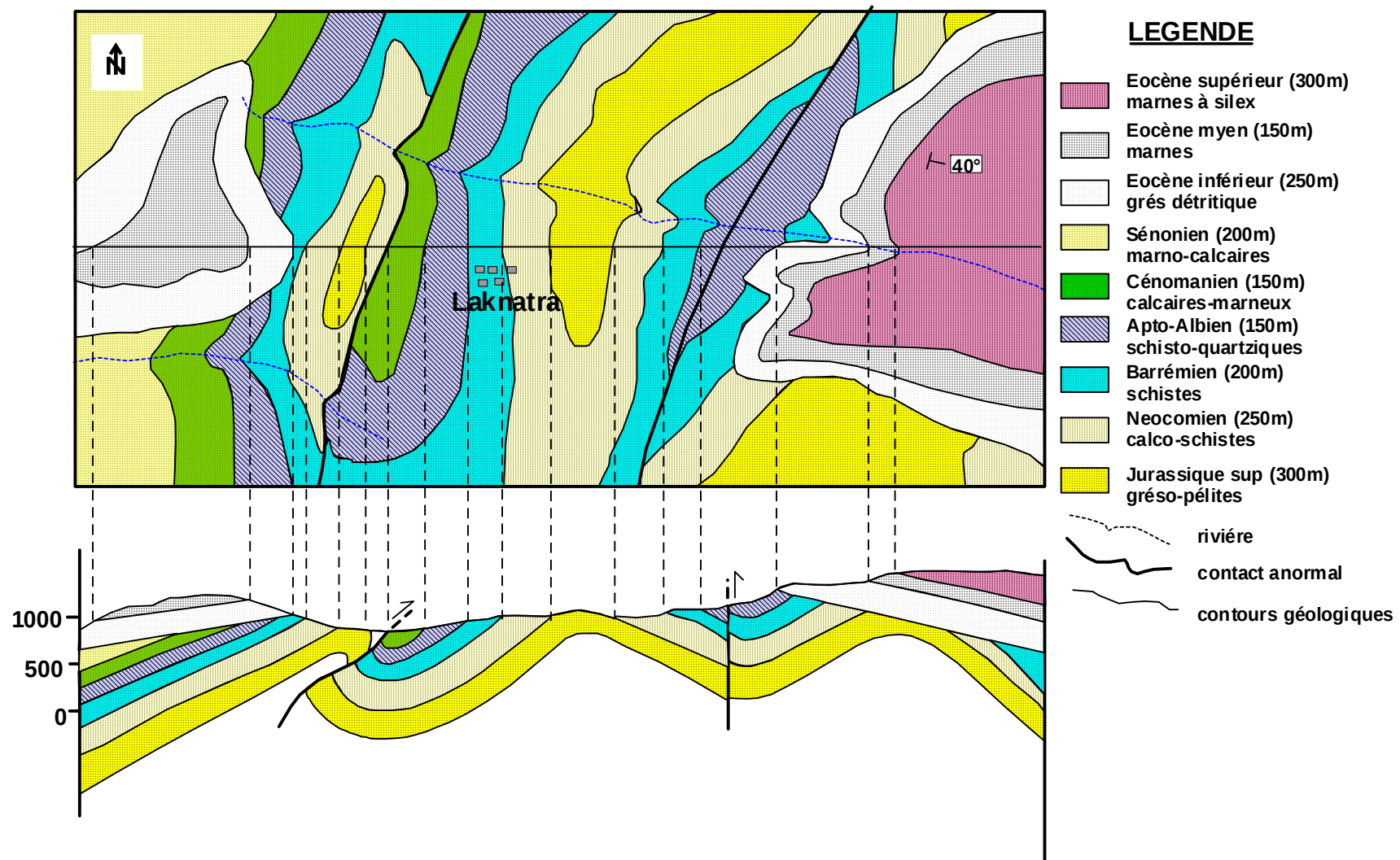


LEGENDE

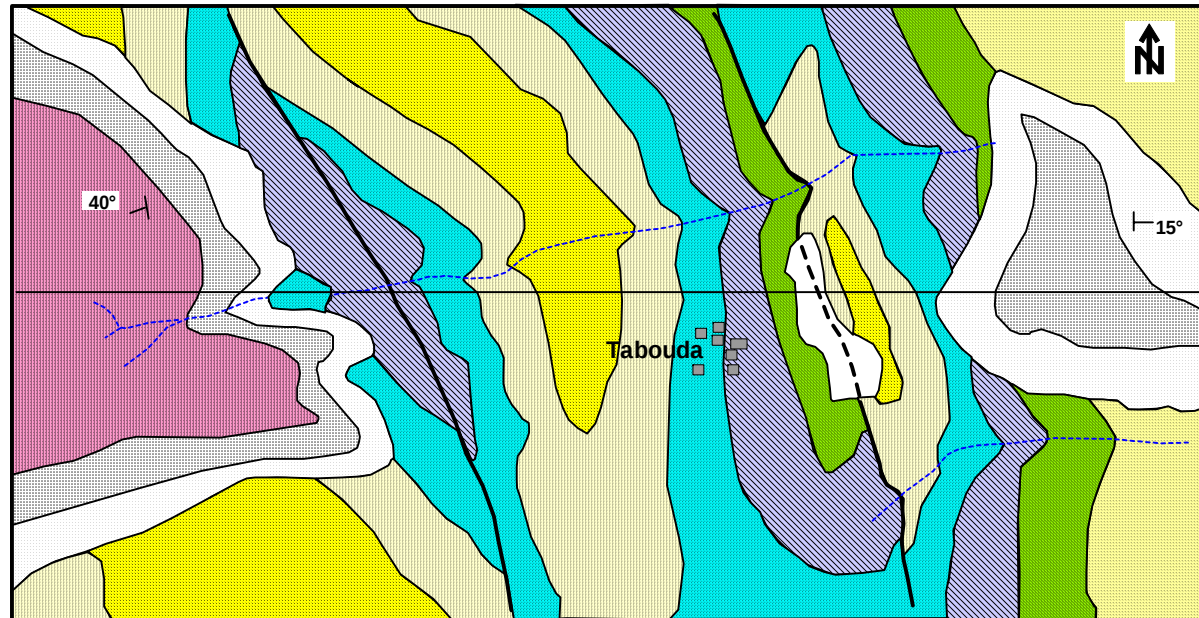
-  Eocène supérieur (300m)
marnes à silex
-  Eocène myen (150m)
marnes
-  Eocène inférieur (250m)
grès détritique
-  Sénonien (200m)
marno-calcaires
-  Cénomanien (150m)
calcaires-marneux
-  Apto-Albien (150m)
schisto-quartziques
-  Barrémien (200m)
schistes
-  Neocomien (250m)
calco-schistes
-  Jurassique sup (300m)
gréso-pélites



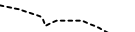
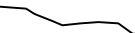
-  rivière
-  contact anormal
-  contours géologiques

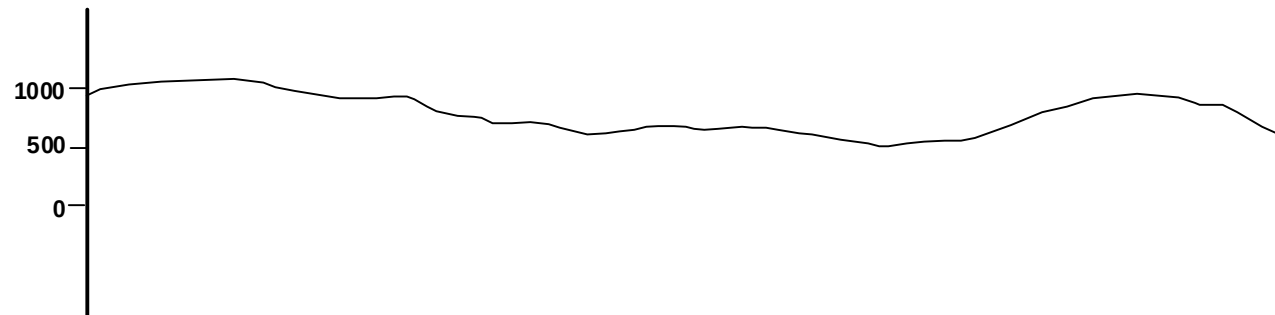


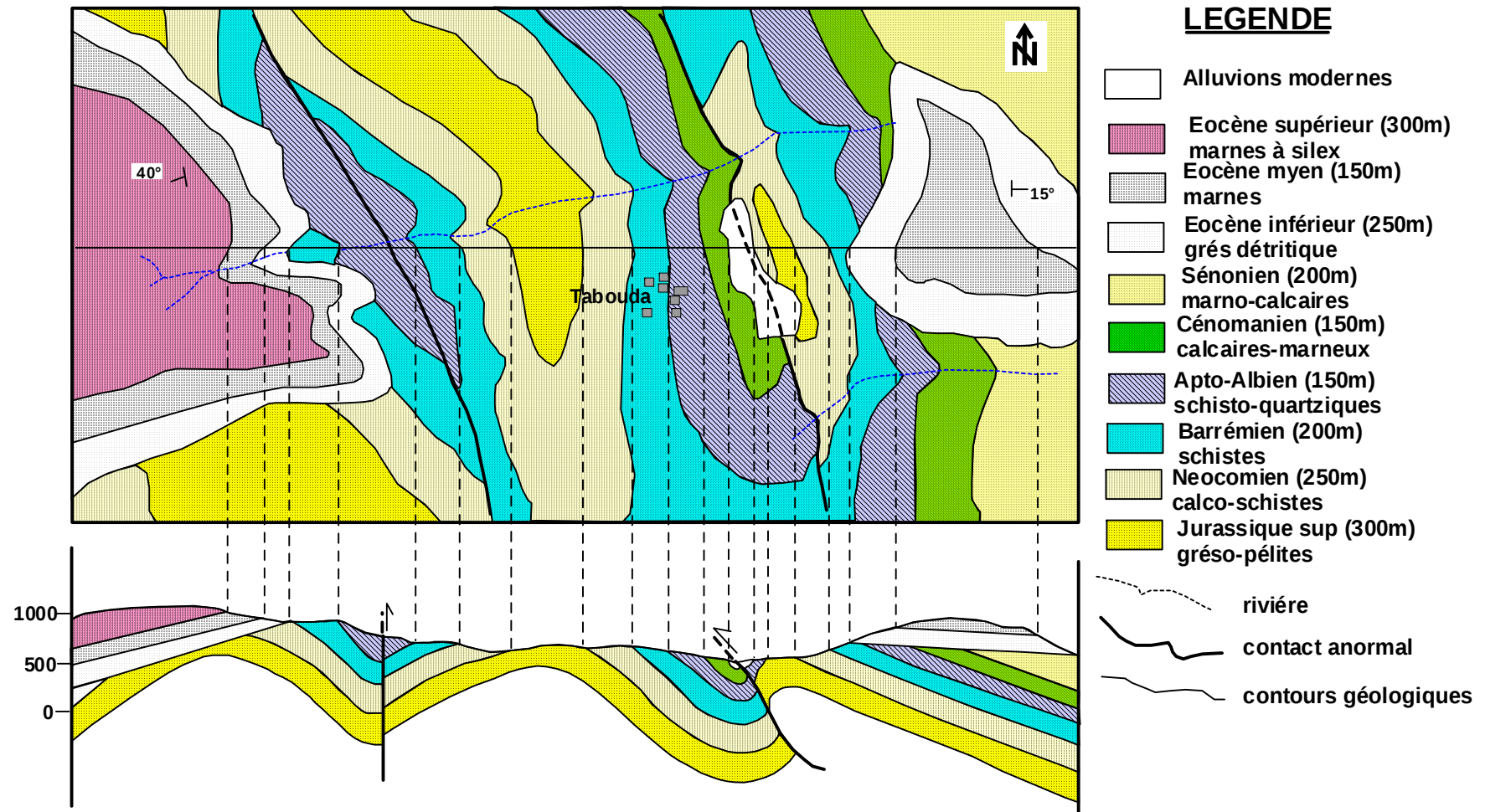
Echelle 1 / 50.000



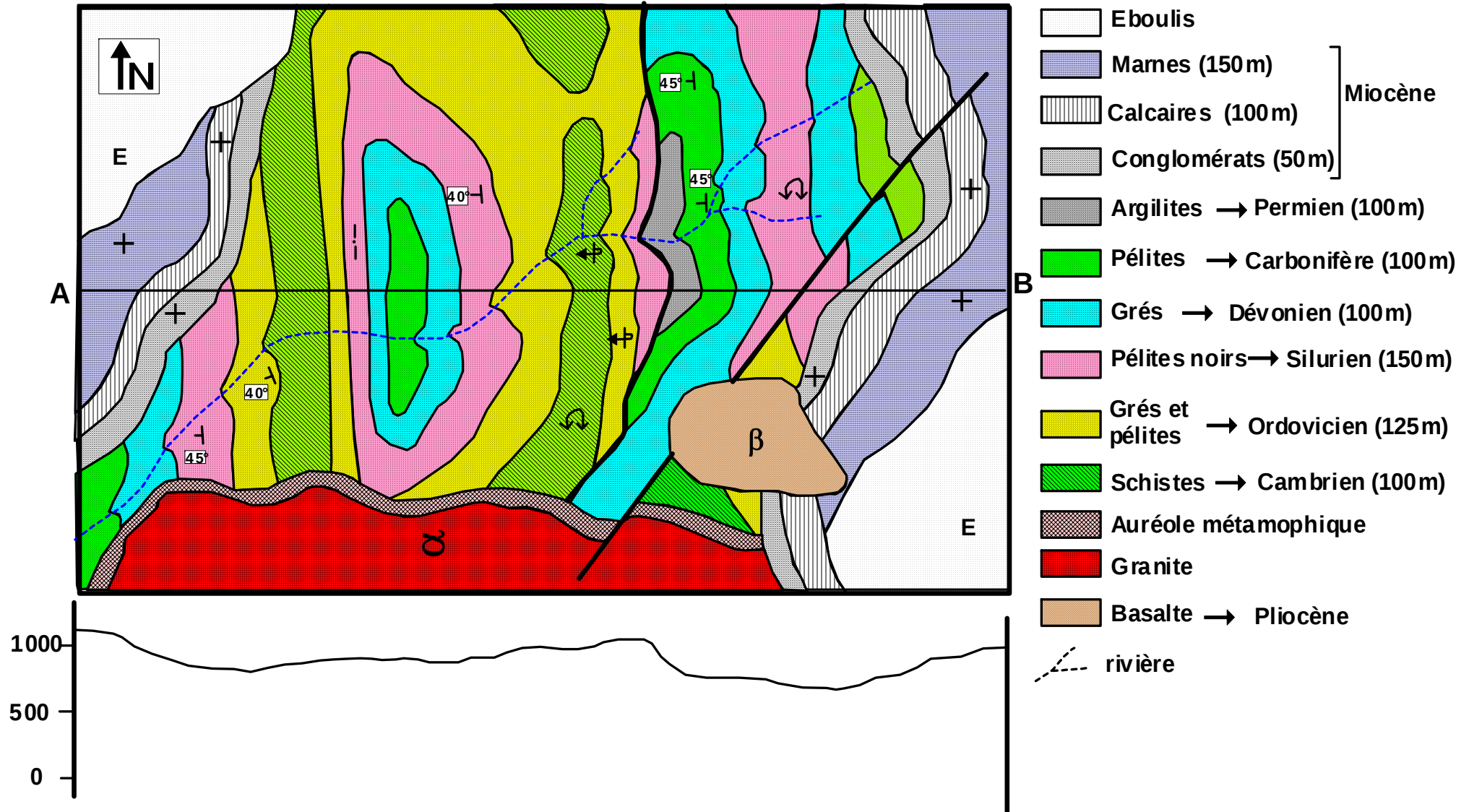
LEGENDE

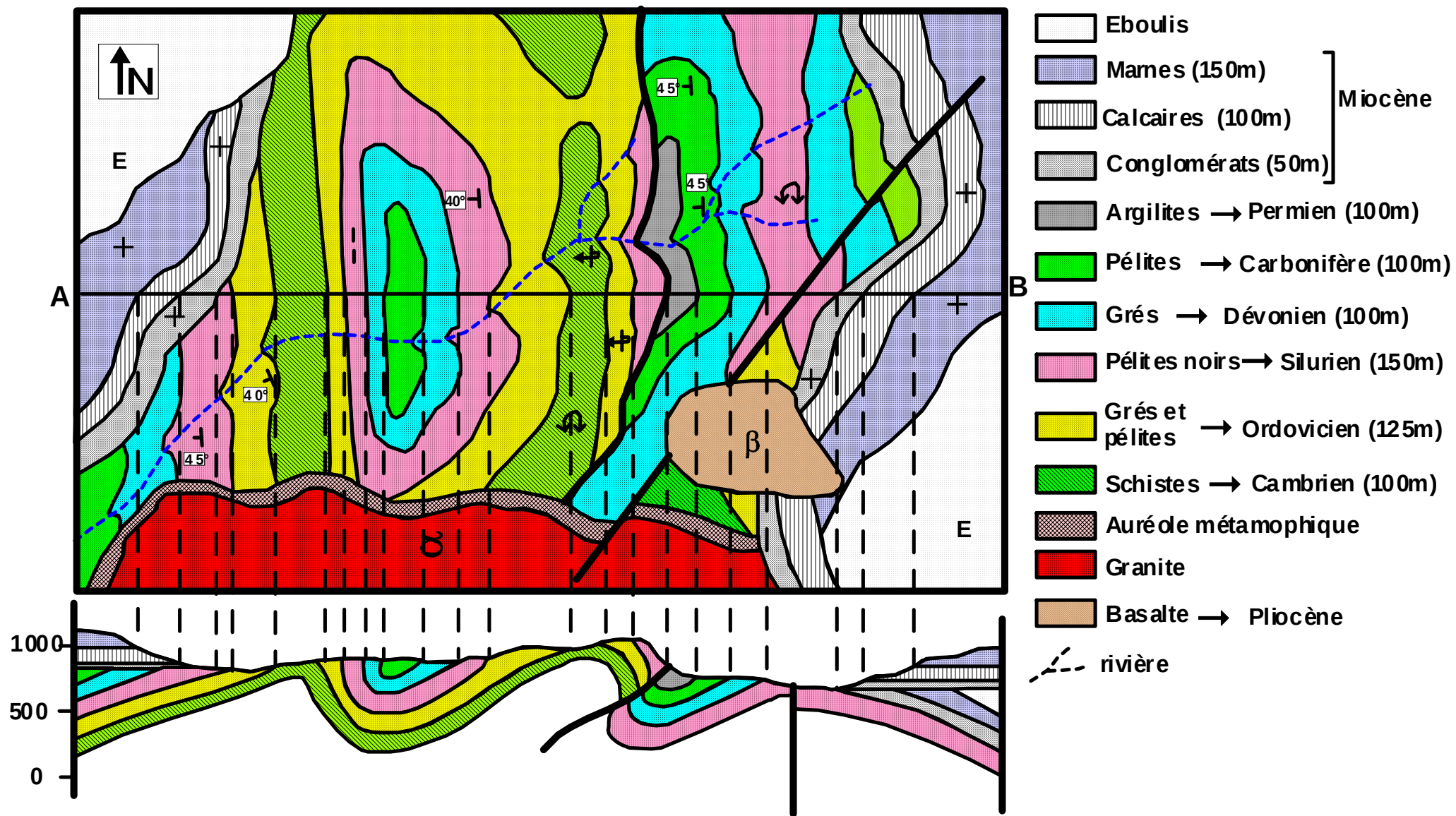
-  Alluvions modernes
-  Eocène supérieur (300m)
marnes à silex
-  Eocène myen (150m)
marnes
-  Eocène inférieur (250m)
grés détritique
-  Sénonien (200m)
marno-calcaires
-  Cénomanién (150m)
calcaires-marneux
-  Apto-Albien (150m)
schisto-quartziques
-  Barrémien (200m)
schistes
-  Neocomien (250m)
calco-schistes
-  Jurassique sup (300m)
grés-pélites
-  rivière
-  contact anormal
-  contours géologiques





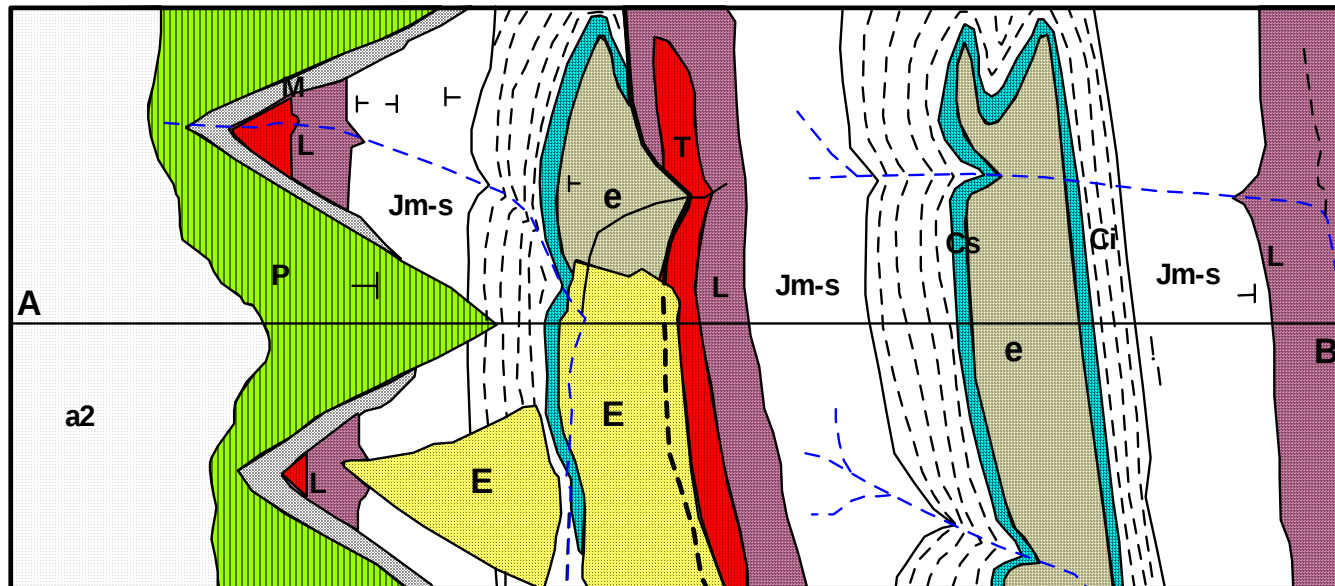
Echelle 1 / 50.000





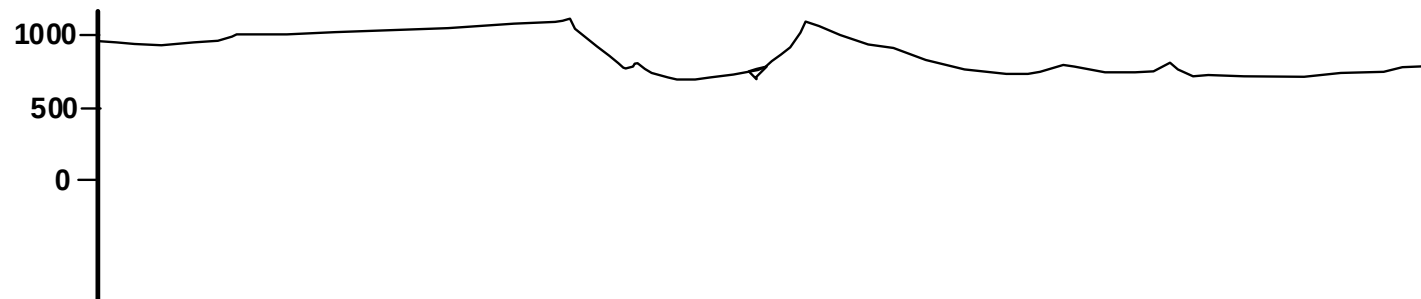
SIDI DAWI

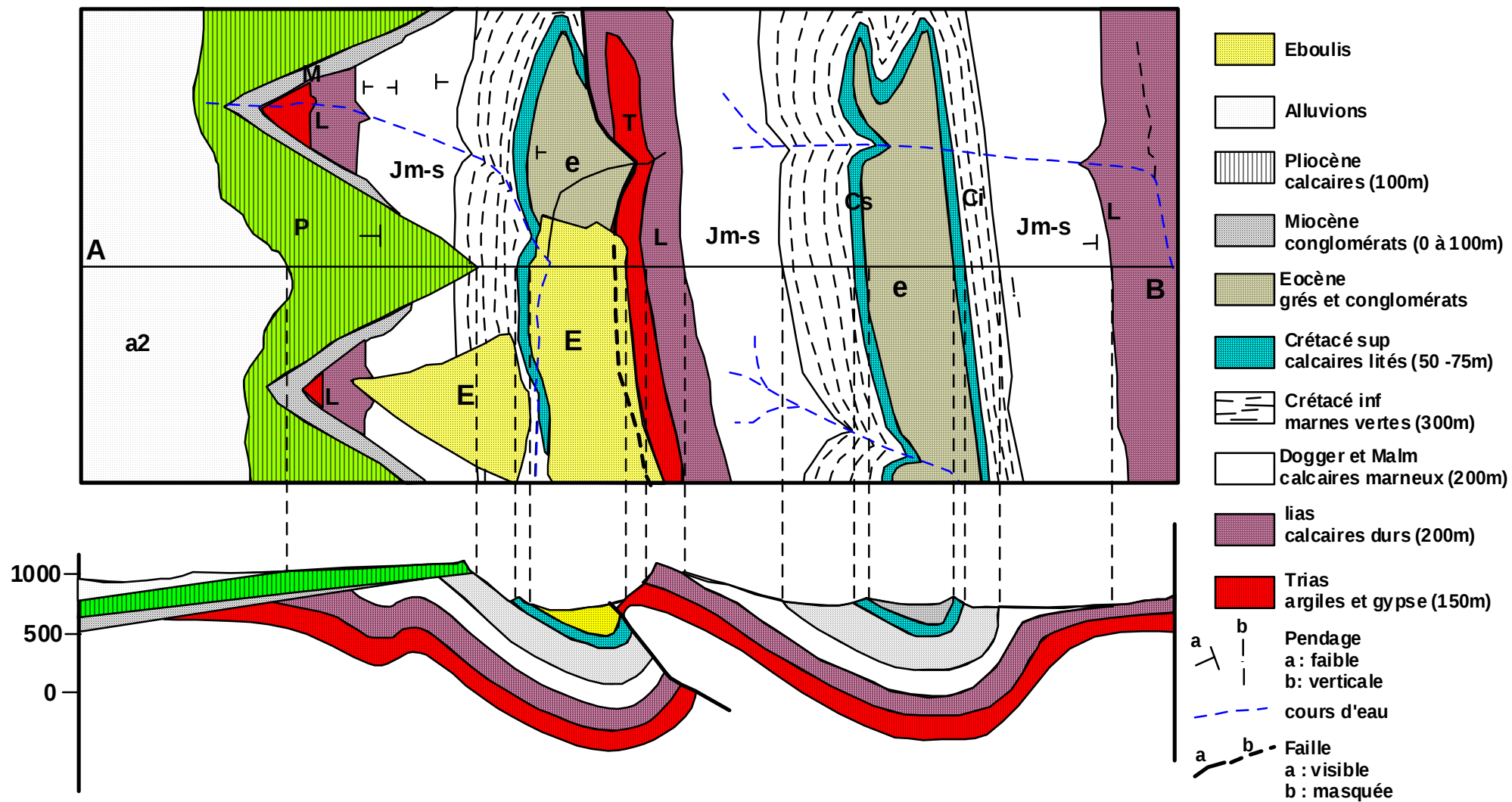
ECHELLE 1 / 50.000



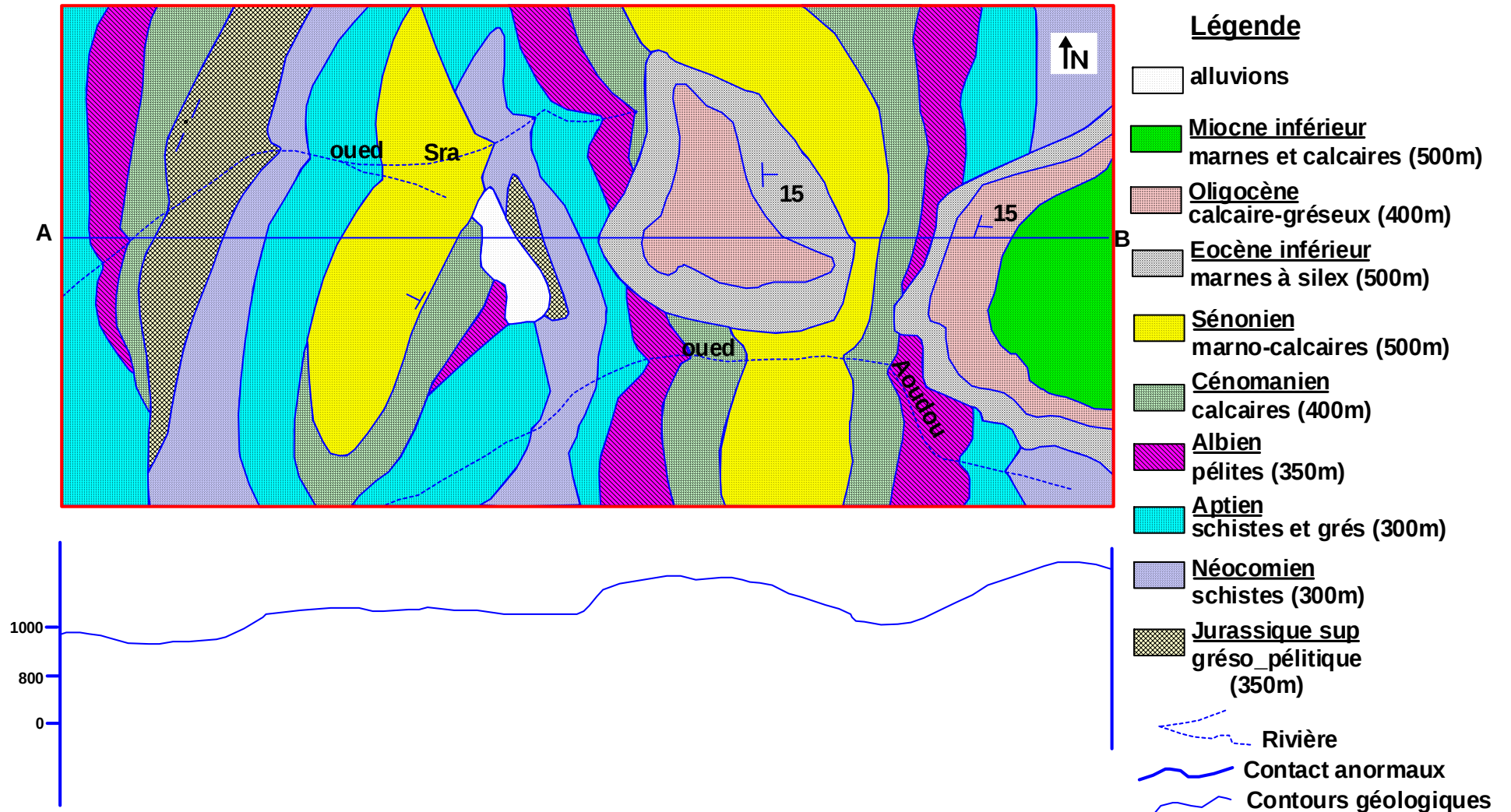
-  Eboulis
-  Alluvions
-  Pliocène calcaires (100m)
-  Miocène conglomérats (0 à 100m)
-  Eocène grés et conglomérats
-  Crétacé sup calcaires lités (50 -75m)
-  Crétacé inf marnes vertes (300m)
-  Dogger et Malm calcaires marneux (200m)
-  Lias calcaires durs (200m)
-  Trias argiles et gypse (150m)

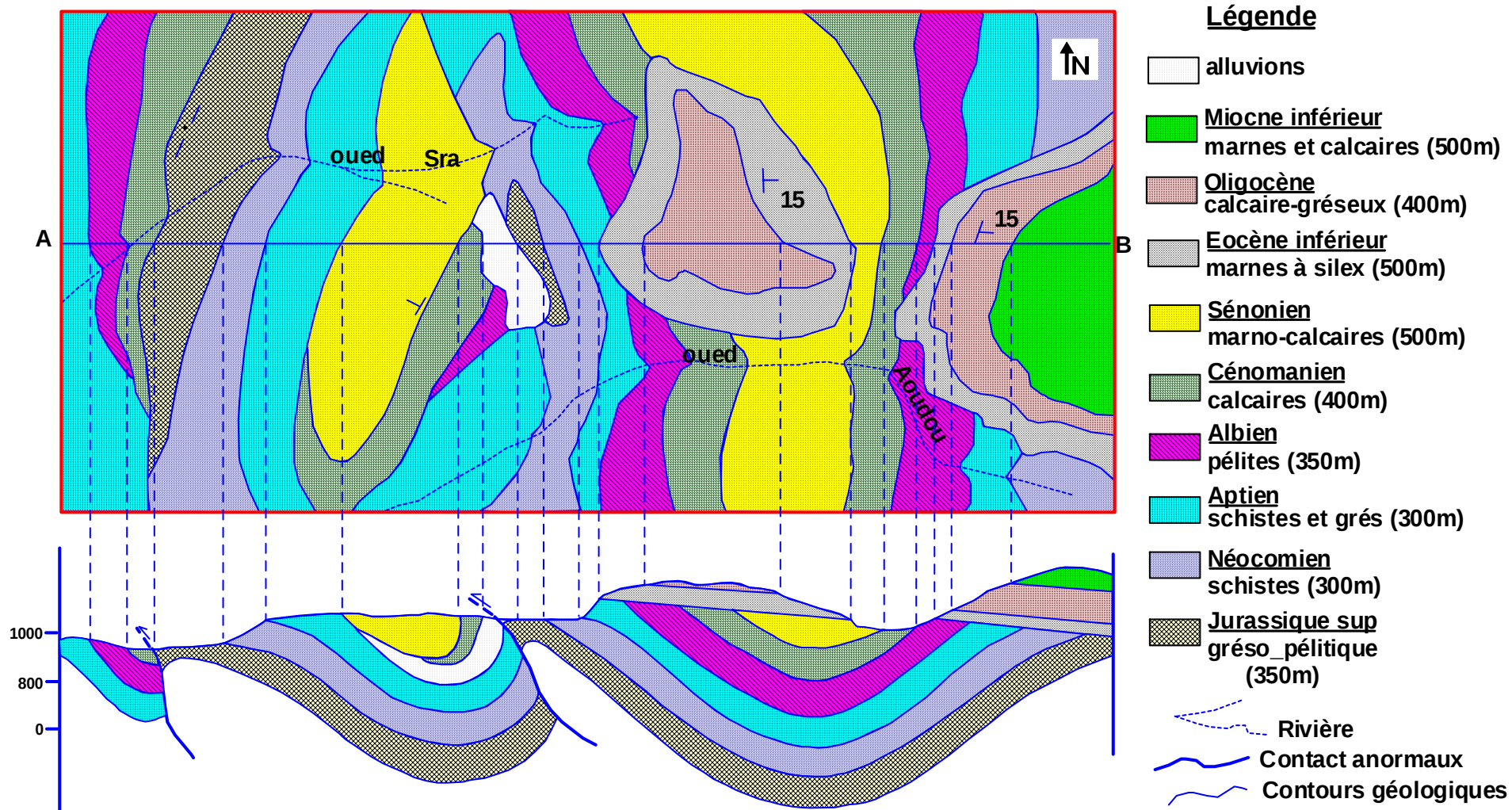
-  Pendage
-  a : faible
-  b : verticale
-  cours d'eau
-  Faille
-  a : visible
-  b : masquée



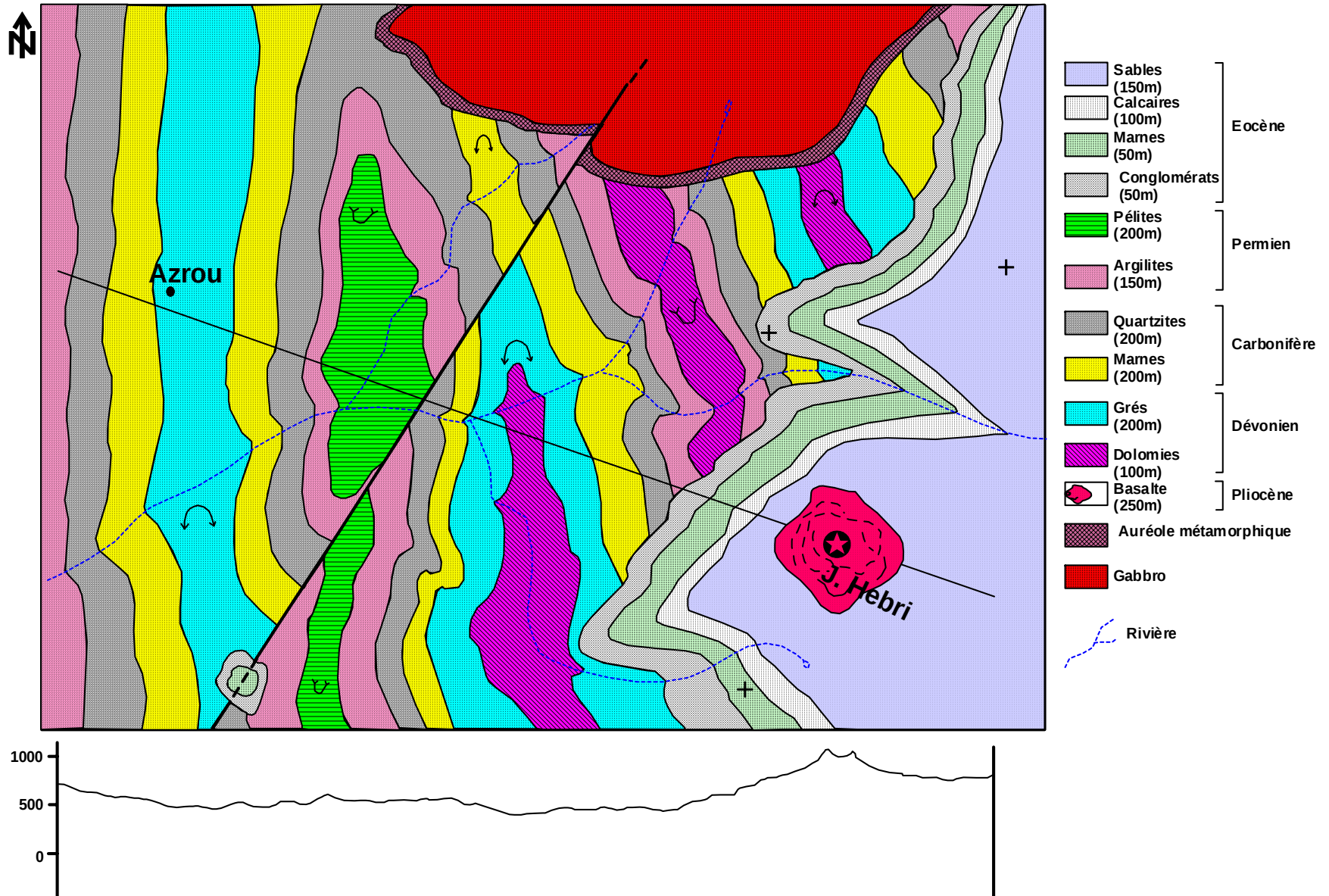


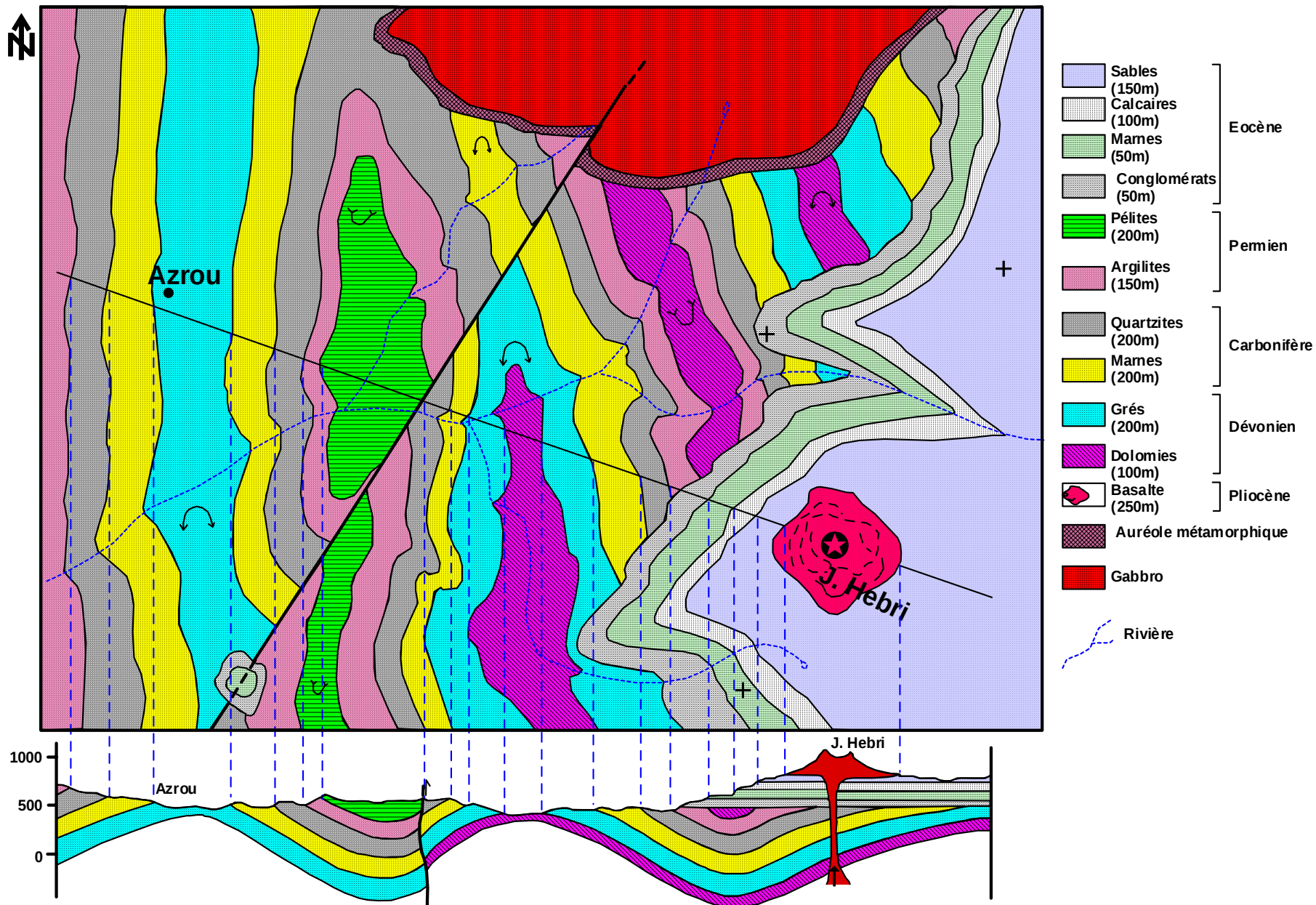
Echelle 1 / 50.000



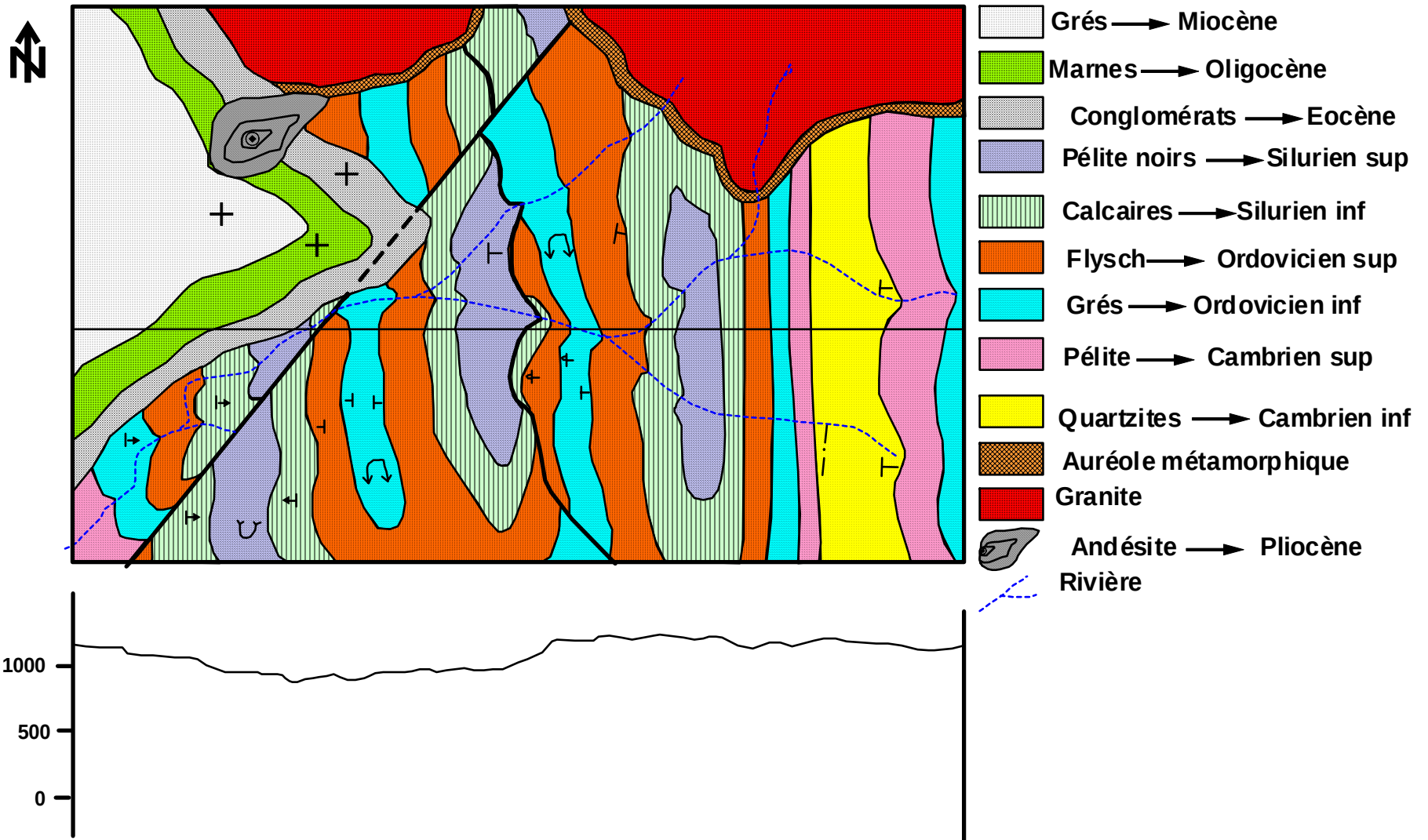


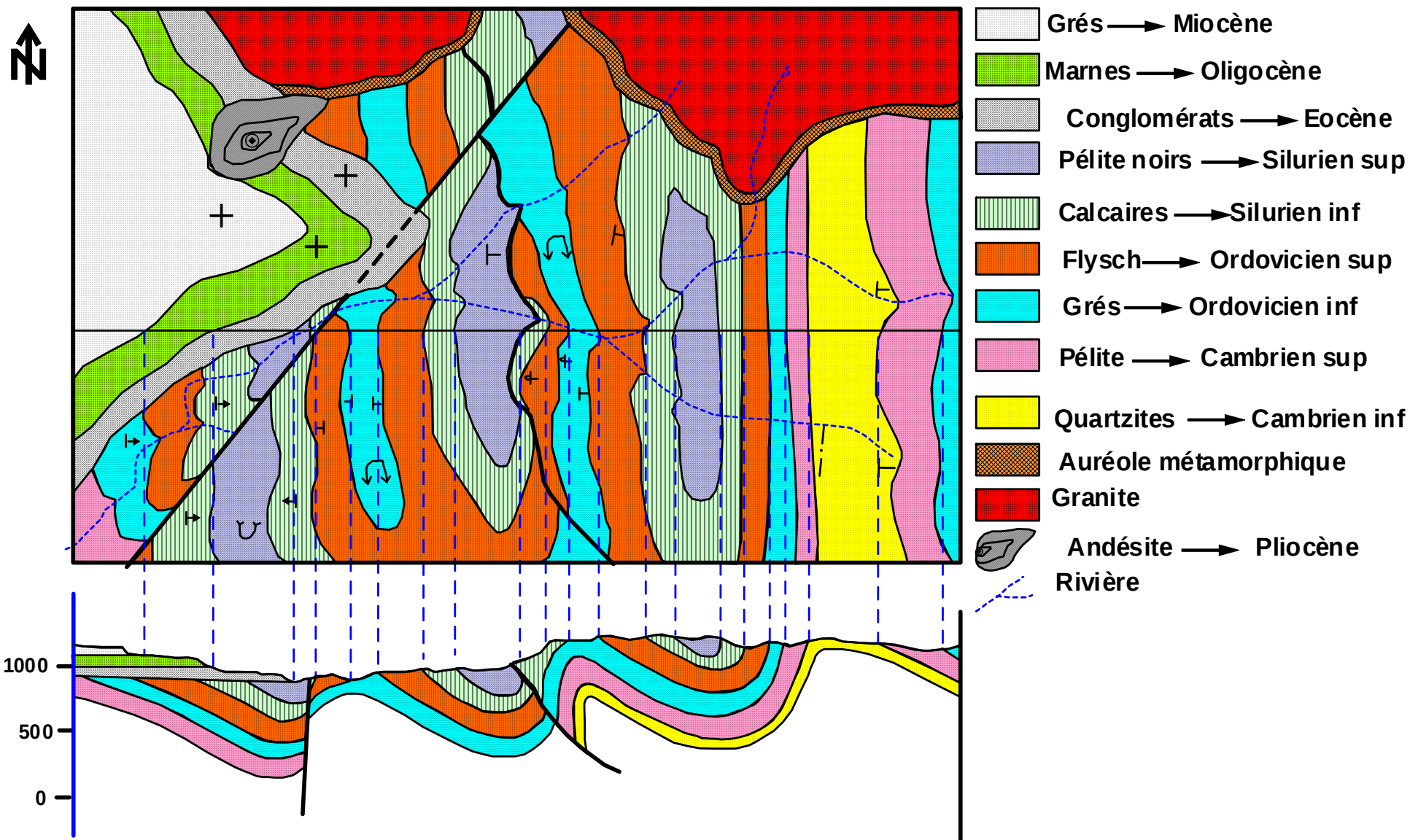
Echelle 1 / 50.000

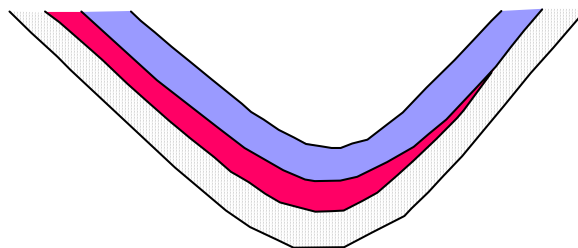
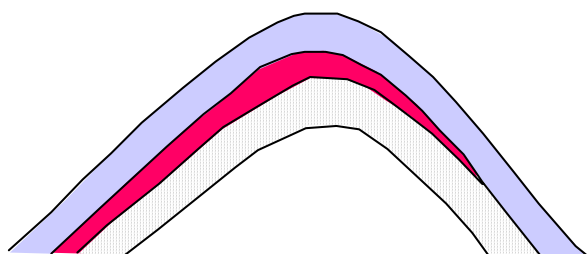
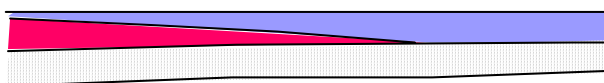
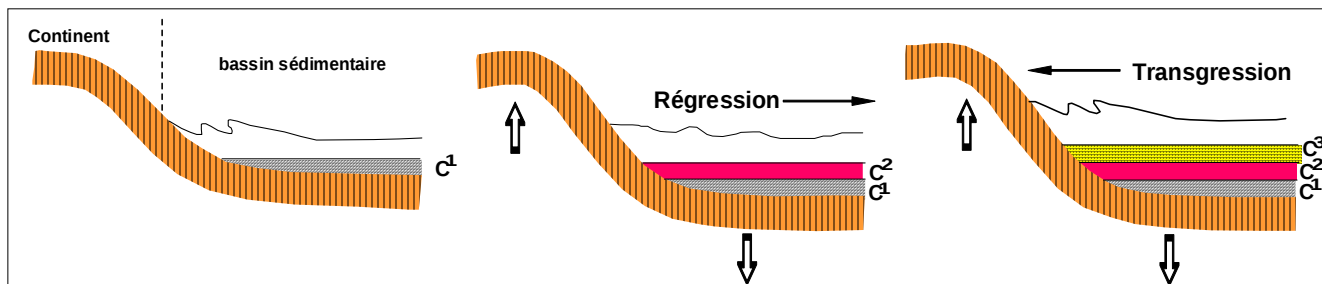


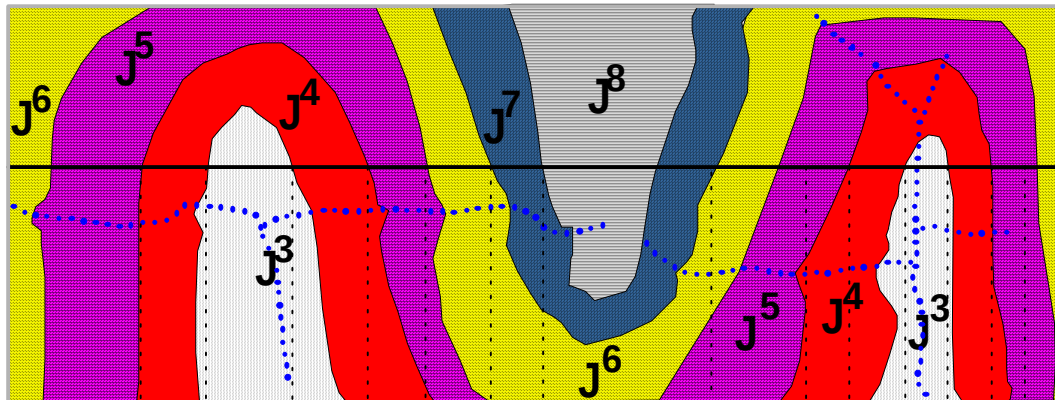


Echelle 1 / 50.000

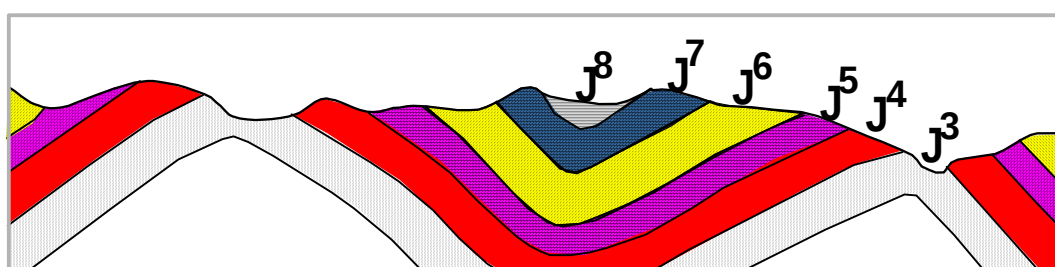
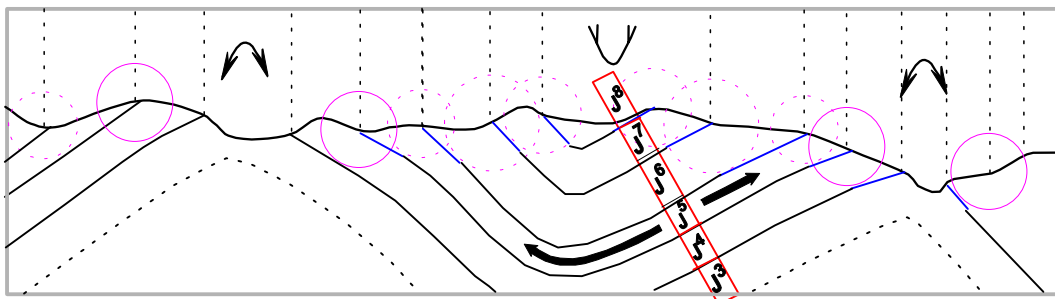
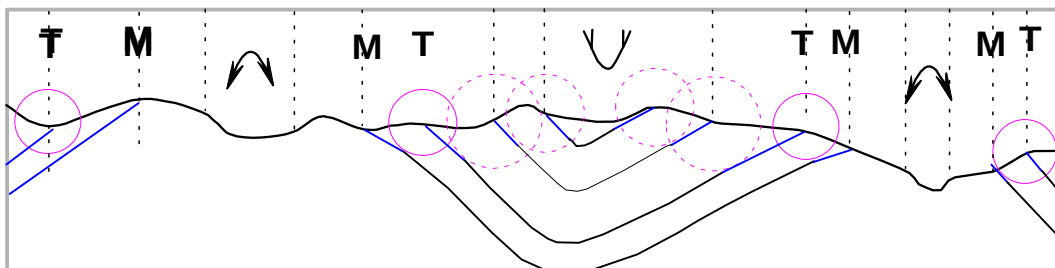
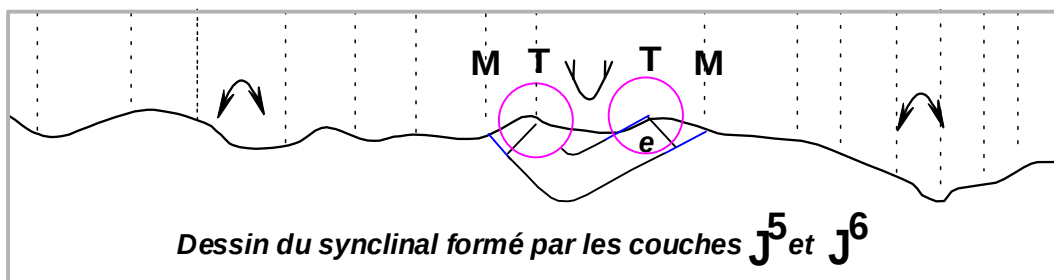
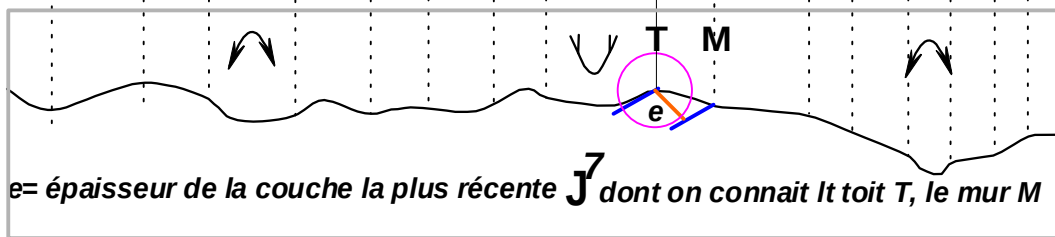


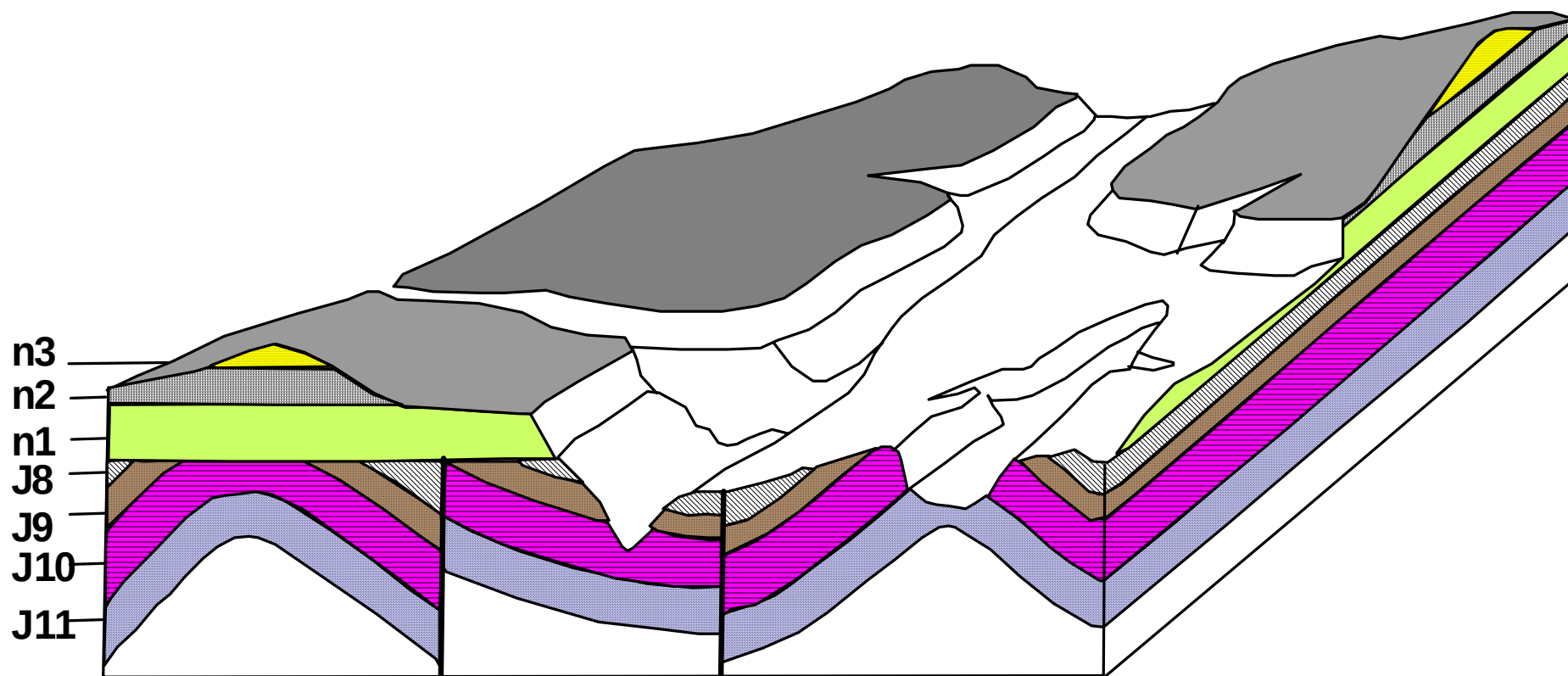






$J^3 = 4\text{mm}$
 $J^4 = 4\text{mm}$
 $J^5 = 4\text{mm}$
 $J^6 = 4\text{mm}$
 $J^7 = 4\text{mm}$
 $J^8 = 4\text{mm}$





FB: S\mathcal{V}T\mathcal{U} S_1 / ST\mathcal{U} S_3 FSSM